Department of Health Services

High-Level Integrated Design Specifications

820 – Payroll Deducted and Other Group Premium Payment for Insurance Products

May 11, 2004

Version 2.1

Document History (Version Control)

Version	Date	Author	Brief Description of Modifications
1.0	11/13/2003	Joey Lawhorn	Created
1.1	02/03/2004	Jon Lazaro	Added Technical Specs
1.2	02/13/2004	Jon Lazaro	Added hardware/software configurations
1.3	02/26/2004	Jon Lazaro	Added functional flows
1.4	03/01/2004	Jon Lazaro	Re-structured into Development and Production Environments
1.5	03/04/2004	Jon Lazaro	Incorporated Amy's changes
1.6	03/08/2004	Jon Lazaro Amy McAllaster	Incorporated Greg's changes Distributed for OHC review
1.7	03/17/2004	Amy McAllaster	Incorporated OHC feedback (Julie)
1.8	04/15/2004	Amy McAllaster	Removed specifications for Xengine in Production Changes tracked for reference after internal review.
1.9	04/21/2004	Amy McAllaster	Changes accepted, review for distribution and approval
2.0	04/30/2004	Amy McAllaster	Distribution for stakeholder review and approval
2.1	05/11/2004	Amy McAllaster	Section 2.1.1 updated information on payment dates per MMCD Final document

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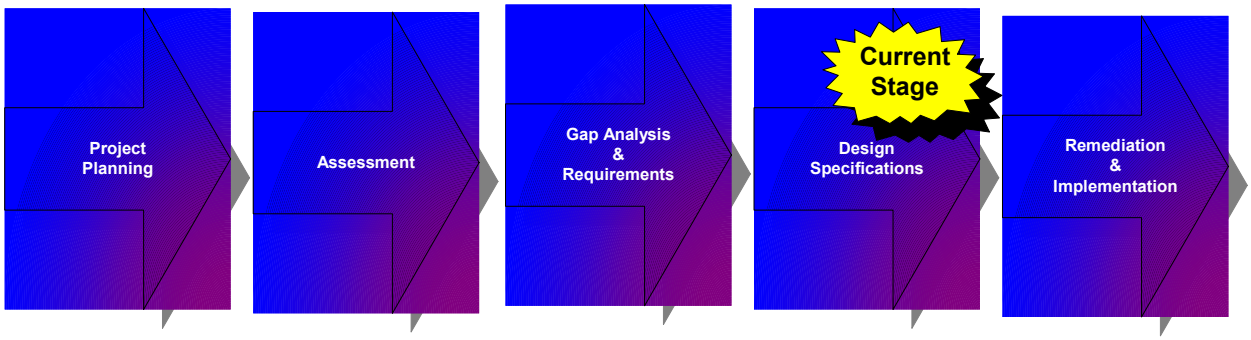
1 Document Overview

This document contains high-level design specifications for those components of the CMS64 Accounting System that were identified as needing remediation during the assessment and gap analysis phases. This design specifications document describes areas of the individual database that will require modifications in order to comply with the implementation specifications set forth by HIPAA for the Payroll Deducted and Other Group Premium Payment for Insurance Products Transaction (herein referred to as the 820 Transaction).

1.1 Project Background

In August 2001, an original HIPAA assessment was performed on Medical Care Services (MCS). The assessment identified HIPAA premium payment impacts in two divisions within MCS: the Medi-Cal Managed Care Division (MMCD) and the Payment Systems Division (PSD). In order for the Department of Health Services (DHS) to move forward with its HIPAA compliance efforts, an assessment that focused on the original findings needed to occur with the intention of identifying to what extent the two Divisions are impacted by 820 Transaction.

The Transactions and Code Sets (TCS) HIPAA Compliance Life Cycle consists of five project phases:



During the Assessment phase of the 820 Transaction Project, the project team created three primary assessment documents:

- Business Assessment Document
- Technical Assessment Document
- Integrated Assessment Document

The intent of the *Business Assessment Document* was to create a business process inventory documenting the specific impacts of the 820 Transaction on the DHS Program Business Areas. The intent of the *Technical Assessment Document* was to reveal which computer systems and processes used by the DHS Program Business Areas were most likely to be impacted by the 820 Transaction. The intent of the *Integrated Assessment Document* was to present an Executive Summary of the Assessment phase which summarized the business and technical assessment findings into one cohesive document, linking the independent assessments. These documents do not define how TCS compliance will be achieved in their respective areas; rather, they are intended to guide future efforts in the Gap Analysis and Requirements phase.

Output from the Gap Analysis and Requirements phase was the *Integrated Gap Analysis & Requirements Document* that intended to elaborate on the specific business, and technical gap analysis findings and link the findings together into one cohesive document. The Gap Analysis and Requirements phase originally called for three separate Gap Analysis & Requirements deliverables to document the business, legal, and technical findings. However, the 820 Transaction Team concluded that the business and technical gap analysis and requirements findings could be presented in a more unified manner as one document; allowing the reader a more comprehensive understanding of the global HIPAA impacts to DHS. Furthermore, the legal assessment conducted in the previous phase of the project did not identify any significant precedents established in case law, or common law, pertinent to the 820 Transaction.

The 820 Transaction Project has progressed according to the established project plan. Departments and Program Areas including: Medi-Cal Managed Care Division (MMCD), Third Party Liability Branch (TPLB), Office of Long Term Care (OLTC), Medi-Cal Dental Services Branch (MDSB), DHS-Financial Management Branch (FMB), and the Department of Finance (DOF) have participated in the review of and have provided sign off on the following deliverables, as requested by DHS-Office of HIPAA Compliance (OHC).

Project Phase	Deliverable	Date Approved
Assessment	Business Assessment	11/18/03
Assessment	Technical Assessment	11/18/03
Assessment	Integrated Assessment	12/30/03
Gap Analysis & Requirements	Business & Technical Requirements	12/30/03
Gap Analysis & Requirements	Solutions Alternatives	04/15/04

1.2 Overview of Project Approach

The objective of *Phase 4 – Design Specifications* of the Transactions and Code Sets (TCS) HIPAA Compliance Life Cycle is to create a detailed set of design specifications documents that would include business and technical specifications necessary to meet the specific needs of the project. In addition, test plans are created.

No significant precedents established in case law, or common law, pertinent to the ASC X12N 820 Transaction were identified. Therefore, design specifications relative to case or common law will not be addressed here; however, this document does describe the considerations for the management of both technology and liability risks.

1.3 Business Specifications Overview

The business specification describes how to accomplish the approved solution from a business perspective. This document details each change necessary to program area procedures, policies, and workflows to accommodate HIPAA compliance.

1.4 Technical Specifications Overview

The technical specifications detail each change required to the systems, application programs, file layouts, data elements, reports, tables, screens, or technical communication protocols to accomplish HIPAA 820 Transaction compliance.

The technical specifications describe how a technical design is implemented to accommodate specific business rules. Technical specifications are written to either modify existing functionality, or introduce new technical functionality and logic to the situation. Technical specifications should also describe the concept and reasons for the change, or any new functionality, as well as provide the detail logic necessary to achieve the desired result.

1.5 Next Steps

Upon completion of the Design Phase, DHS-OHC will be positioned to plan for remediation and implementation. The plan will include all necessary business and technical remediation activities through to the go-live status for the 820 Transaction.

The Business and Technical Remediation deliverables should include remediation plans and efforts necessary to change the policies, procedures and technical components needed for the 820 Transaction to be HIPAA compliant. The remediation plan will describe:

- Organization of the remediation effort
- Resource skills required and assignments
- Sequence of work activities

The remediation plan will also include the identification of critical dependencies and risks requiring a contingency plan.

2 Business Specifications

This section of the document details the impacts that HIPAA remediation may have on the current business environments. These requirements center on the business and operational requirements of the DHS-FMB-Accounting Section, Medi-Cal Local Assistance Payment Unit. Additionally, the business and operational requirements currently established by MMCD and MDSB relative to capitation payments, and by TPLB for premium payments under the Health Insurance Premium Payment (HIPP) program, Breast and Cervical Cancer Treatment Program (BCCTP), and the Medicare Plus Choice (M+C) Premium Payment program, are analyzed and documented for potential related impacts that may occur due to implementing the ASC X12N 820 Transaction.

2.1 DHS-Financial Management Branch (FMB)

2.1.1 Business Overview

The Medi-Cal Local Assistance Payment Unit of the Accounting Section (herein referred to as the Unit) is responsible for assisting MMCD and TPLB with their capitation and premium payments processes. Capitation payments to the Managed Care Organizations (MCOs) must be processed by the 25th of each month in order for the payment to be received by the MCOs at the end of each month.

Upon receipt of invoices and any supporting documentation sent by the Program Business Areas, the Unit enters claim schedules based on the Program Business Area's invoice in the CMS64 Accounting System. The CMS64 Accounting System provides a daily upload file to CALSTARS of all the claim schedules enter for that day. The upload file contains the necessary data for CALSTARS to create the Remittance Advice and Warrant Write File so that the State Controller can issue a warrant for payment.

2.1.2 Business Specifications

A transaction mapping exercise was performed on the CMS64 Accounting System to determine the amount of effort that is needed to obtain compliance with the 820 Transaction. This mapping exercise pinpointed the relevant data inputs on the CMS64 Accounting System side to the equivalent data outputs on the 820 Transaction.

The CMS64 Accounting System to 820 Transaction mapping exercise found that 14 out of the 33 (42%) required/situational 820 Transaction data elements are present on CMS64. Missing are 19 (58%) of the required/situational 820 Transaction data elements on CMS64. These missing data elements, whether 'required' or 'situational', represent data that is not currently captured in CMS64. The missing data elements are listed in **Table 1 – 820 Data Elements Not Found in CMS64.**

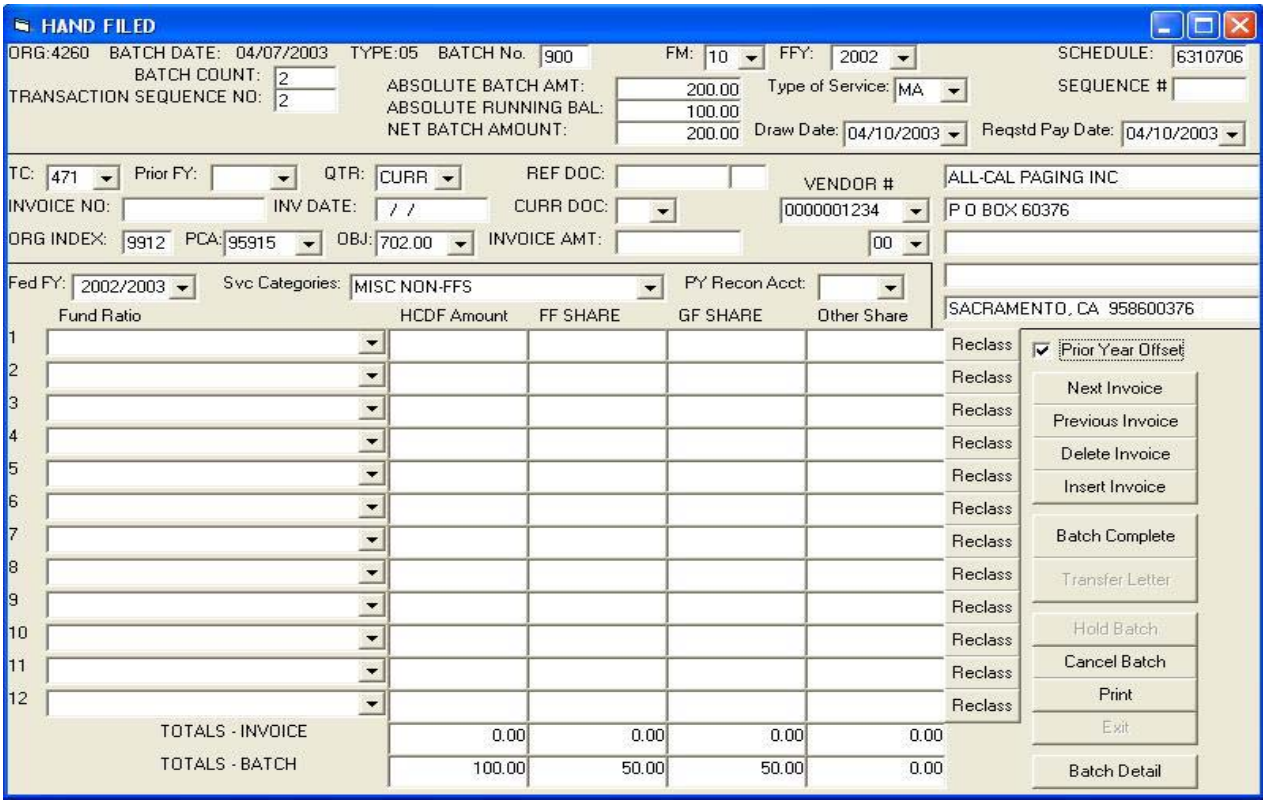
Table 1 – 820 Data Elements Not Found in CMS64

Loop ID	Reference Descriptor	Segment Name	Data Element Name	Usage Description
Header	BPR16	Financial Information	Check Issue or EFT Effective Date	Warrant Issuance Date
Header	TRN02	Re-association Key	Check or EFT Trace Number	Warrant Number
Header	DTM06	Coverage Period	Coverage Period	Coverage Period Date Range.
1000A	N104	Premium Receiver's Name	Receiver Identifier	MCO or Health Plan Tax ID
1000B	N104	Premium Payer's Name	Premium Payer Identifier	DHS Tax ID
1000B	N301	Premium Payer's Address	Premium Payer Address Line	DHS' Address 1
1000B	N302	Premium Payer Address	Premium Payer Address	DHS' Address 2
1000B	N401	Premium Payer City ST ZIP	Premium Payer City	DHS' City Name
1000B	N402	Premium Payer City State ZIP	Premium Payer State	DHS' State Name
1000B	N403	Premium Payer City State ZIP	Premium Payer Postal Zone or ZIP Code	DHS' ZIP Code
1000B	N404	Premium Payer City State ZIP	Country Code	This is required when the address is outside the U.S.
1000B	N403	Premium Payer Administrative Contact	Premium Payer Contact Name	DHS Contact Name

Loop ID	Reference Descriptor	Segment Name	Data Element Name	Usage Description
1000B	PER04	Premium Payer Administrative Contact	Communication Number	DHS Contact Phone Number
2000A	ENT04	Organization Summary Remittance	Organization Identification Code	DHS Tax ID
2000B	ENT04	Individual Remittance	Receiver's Individual Identifier	Patient Member ID Number
2300A	RMR05	Organization Summary Remittance Detail	Billed Premium Amount	This is required when the paid amount is different from the amount billed.
2320A	ADX01	Organization Summary Remittance Level Adjustment	Adjustment Amount	This is the dollar difference between the billed amount and the paid amount.
2300B	RMR05	Individual Premium Remittance Detail	Billed Premium Amount	This is required when the paid amount is different from the amount billed.
2320B	ADX01	Individual Premium Adjustment	Adjustment Amount	This is the dollar difference between the billed amount and the paid amount.

In order to accommodate this missing data, business workflows must be modified. In the case of *'Coverage Period'*, *'Billed Amount'*, and *'Adjustment Amount'*, these figures are not currently captured in existing processes, nor do fields exist on the present CMS64 Accounting System Hand-filed Screen (**Figure 1 – CMS64 Hand-filed Screen**) to retain this information.

Figure 1 – CMS64 Hand-filed Screen



In discussions with Medi-Cal Local Assistance Payment Unit Subject Matter Experts, they were able to offer some suggestions in an attempt to resolve missing CMS64 Accounting System data content required for remediation.

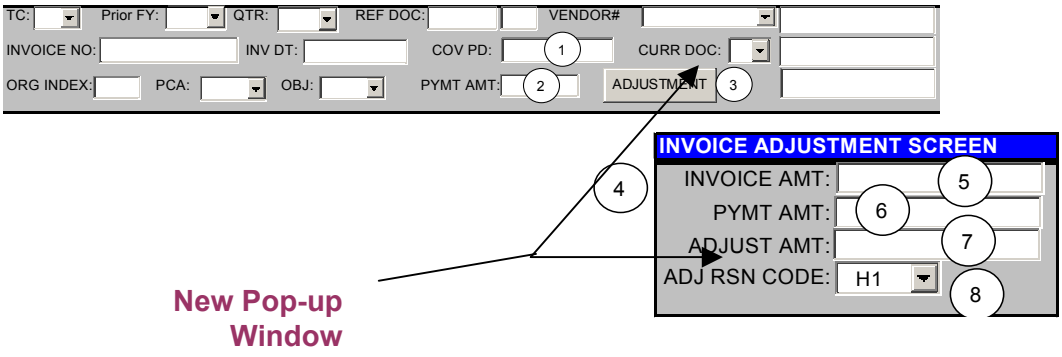
Table 2 - CMS64 Data Content Resolution, outlines the issues and solutions for missing data content.

Table 2 - CMS64 Data Content Resolution

Data Content Issue	Resolution
Coverage Period needs to be captured	For HIPP and BCCTP, the *Reference Doc* field may be used to capture this information. For Other Managed Care the contract number is put in the *'Reference Doc'* field leaving nowhere to put this *Coverage Period* information. One possibility is that another field be added in CMS64 *Hand-filed* screen to capture this information. This would require adding a new field to the database and additional programming to add this to the *Hand-Filed* screen.
If paying an amount different than the original invoiced need to capture both the *Billed Amount* and *Adjusted Amount*.	The *Hand-Filed* screen does not provide enough room for a new *Billed Amoun*t field. One possibility is to add a command box with a pop-up screen in which the user could type in *Billed Amount*. The user would only use this if the approved invoice amount were different than the billed amount. This would require adding a new field to the database and additional programming to add this functionality to the screen.
Need to add the Vendor's Federal Tax ID to the CMS64 Vendor Table	Need to add a field to the CMS64 Vendor Table to capture the vendor's and DHS' Federal Tax ID Number. Would need ITSD to change the daily procedure to bring in the Federal ID.
Need to add DHS Name, Address, and Contact Information	Data to come from the CALSTARS Vendor Edit table In the daily download.
Need to create an extract file from CMS64	Create an extract from CMS64 and merge with the CD102 file. Merged file will contain Warrant Number and Warrant Issue Date.

Figure 2 – Modified Hand-Filed Screen Section represents a portion of the existing CMS64 *Hand-Filed* Screen and is annotated with modifications necessary to support some of the required changes. The functionality of each new field being added, identified by numbers 1-8, is discussed in the Technical Specifications section of this document.

Figure 2 – Modified Hand-Filed Screen Section



2.2 Information Technology Services Division (ITSD)

2.2.1 Business Overview

ITSD provides comprehensive information technology services to the DHS:

- IT consulting services
- IT project management
- Application system products and support
- Infrastructure products and support (including network, local area networks, servers, web and desktop)
- Implementation of IT policies and standards
- IT planning and oversight

Specifically, the ITSD-Medi-Cal Applications Section (MAS) provides Medi-Cal programs with:

- Application project management
- Application consulting
- Application project initiation
- Application system design, programming, testing, and implementation
- Production support of application systems
- Enhancements to existing application systems

The MAS, or other designee, will be an integral part of implementing and supporting the HIPAA compliant 820 Transaction process. Specific details regarding the Sections participation are discussed in Section 2.2.2 below.

2.2.2 Business Specifications

It will be necessary to have a support person merge the monthly CMS64 extract file and the CD102 file in order to facilitate the re-association of *warrant number* and *issue date* found on the CD102 file with the CMS64 data. The support person will load the resultant merged file into the Extract Transform and Load (ETL) software to be transformed into an 820 Transaction. On an intermittent basis, the 820 Transaction will then be used as input to the compliance checking software to ensure a compliant 820 Transaction has been generated. DHS will then use FTP to post the individual files to the Medi-Cal Website for retrieval by the MCO or Health Plan.

2.3 Medi-Cal Managed Care Division (MMCD)

2.3.1 Business Overview

The Claims Payment Unit, which is housed within the Fiscal Analysis Section of MMCD, is responsible for initiating capitation payments to the MCOs. Included with the medical MCOs is the initiation of capitation payments for the dental MCOs on behalf of MDSB. In addition to the MCOs, the Claims Payment Unit, on the behalf of the OLTC, initiates payments to PACE and S/HMO (SCAN) programs.

The Claims Payment Unit receives the current month's Fiscal Intermediary Access to Medi-Cal Eligibility (FAME) Health Care Plan (HCP) Extract from DHS–ITSD. The FAME HCP Extract is a subset of the Medi-Cal Eligibility Data System (MEDS) and is recreated by ITSD when MEDS is updated via the nightly and month-end MEDS update processes. The Claims Payment Unit reconciles the capitation payments made to the MCOs and manually inputs the results into the Master File, which is a Microsoft Excel spreadsheet; reference **Figure 3 – Master File Sample**. The Claims Payment Unit also calculates the CMS64 Waiver Data on all invoices. The Master File is updated for all applicable changes (e.g. aid code, rates, contract term) within the MCO contracts. As needed during the month, retroactive and adjusting invoices are produced and submitted to the Accounting Section within DHS Administration for payment. The Master File is the source for the Capitation Payment Invoices (Capitation Worksheets) that are forwarded to the Accounting Section.

2.3.2 Business Specifications

The current method of informing the health plans of the breakdown of the monthly capitation payments is via the Master File. A hardcopy of this spreadsheet is mailed directly to the health plans and is separate from the Remittance Advice and Warrant issued by the State Controllers Office (SCO).

There will be no change to the existing business processes. The health plans will continue to receive both the Master File, as well as the current paper remittance advice that accompanies the paper warrant issued by the SCO.

Figure 3 – Master File Sample

ALAMEDA ALLIANCE FOR HEALTH
CALIFORNIA CHILDREN SERVICES/DENTAL WAIVER
2-PLAN (LOCAL INITIATIVE) WORKSHEET (FY 05/06)

CONTRACT NO: 95-23483 A11, C10 **MONTH:** **VENDOR: PHP0130000-00** #300 (ALA)
TERM: 12/31/03 PREPD BY: HP

GROUPS	AID CODE	NET CHANGES	INITIAL ELIGIBLES	RATES (10/01/01)	NET CHANGES AMOUNT	INITIAL AMOUNT
1) PA FAMILY	30	0	0			
	32	0	0			
	33	0	0			
	35	0	0			
	38	0	0			
	39	0	0			
	40	0	0			
	42	0	0			
	54	0	0			
	59	0	0			
	3E	0	0			
	3G	0	0			
	3H	0	0			
	3L	0	0			
	3M	0	0			
	3P	0	0			
	3R	0	0			
	3U	0	0			
	4F	0	0			
	4G	0	0			
	4M	0	0			
SUBTOTAL		0	0	$115.49	$0.00	$0.00
TITLE XXI						
1A) PA FAMILY	7X	0	0			
SUBTOTAL		0	0	115.49	0.00	0.00
2) MN FAMILY	34	0	0			
	3A	0	0			
	3C	0	0			
	3N	0	0			
	5X	0	0			
	47	0	0			
	72	0	0			
SUBTOTAL		0	0	115.49	0.00	0.00
2A) MN FAMILY (ENHANCED TITLE XIX)	8P	0	0			
		0	0	115.49	0.00	0.00
3) PA AGED	10	0	0			
	16	0	0			
	18	0	0			
SUBTOTAL		0	0	182.35	0.00	0.00
4) MN AGED	14	0	0			
	1E	0	0			
	1H	0	0			
SUBTOTAL		0	0	182.35	0.00	0.00

GROUPS	AID CODE	NET CHANGES	INITIAL ELIGIBLES	RATES (10/01/01)	NET CHANGES AMOUNT	INITIAL AMOUNT
7) PA BLIND	20	0	0			
	26	0	0			
	28	0	0			
SUBTOTAL		0	0	$272.87	$0.00	$0.00
8) MN BLIND	24	0	0			
	2E	0	0			
	6A	0	0			
SUBTOTAL		0	0	272.87	0.00	0.00
11) PA DISABLED	36	0	0			
	60	0	0			
	66	0	0			
	68	0	0			
SUBTOTAL		0	0	272.87	0.00	0.00
12) MN DISABLED	64	0	0			
	6C	0	0			
	6E	0	0			
	6H	0	0			
	6N	0	0			
	6P	0	0			
	6R	0	0			
	6V	0	0			
SUBTOTAL		0	0	272.87	0.00	0.00
15) MI CHILD	03	0	0			
	04	0	0			
	45	0	0			
	82	0	0			
	4A	0	0			
	4K	0	0			
	5K	0	0			
	7J	0	0			
	7A	0	0			
	4C	0	0			
SUBTOTAL		0	0	103.48	0.00	0.00
15A) MI CHILD (ENCHANCED TITLE XIX)	8R	0	0			
		0	0	103.48	0.00	0.00
16) MI ADULT	86	0	0			
SUBTOTAL		0	0	1,031.50	0.00	0.00
17) REFUGEES (FEDERAL ONLY)	01	0	0			
	02	0	0			
	08	0	0			
	0A	0	0			
SUBTOTAL		0	0	115.49	0.00	0.00

SUBTOTAL NET CHANGES	0	$0.00
SUBTOTAL INITIAL	0	$0.00
TOTAL CAPITATION		$0.00

I hereby certify to the best of my knowledge and belief that the claims submitted and attached herein, are claims for the Medicaid program under title XIX of the Social Security Act (the Act), and as applicable, under the State Children's Health Insurance Program (SCHIP) under Title XXI of the Act, and **are allowable in accordance with applicable implementing federal, state, and local statutes, regulations, policies, and the state plan (including any approved waivers of the state plan) approved by the Secretary and in effect at the corresponding time commensurate with the claims aforementioned and furthermore, I certify that federal matching funds are not being claimed for any expenditure under any Medicaid and/or SCHIP state plan amendment that was submitted after January 2, 2001, and that has not been approved by the Secretary effective for the applicable quarter associated with the claims aforementioned.**

Further, I direct the Accounting section to process the attached claims for payment certifying to the best of my knowledge and belief that the payee has met the contractual conditions for such payment(s) and the following Accounting codes are appropriate for such payment(s).

Signature

Date

Title

FUNDING BREAKDOWN FOR ACCOUNTING USE:

TITLE XXI	INDEX: 9910	OBJ: 702	PCA: 95962	
AMOUNT TO BE PAID BY HEALTHY FAMILIES				$0.00
TITLE XIX	INDEX: 9912	OBJ: 702	PCA: 95915	
ENHANCED TITLE XIX (HF)				$0.00
REFUGEE ONLY (100% FEDERAL) TOTAL AMOUNT DUE				0.00
FFP TOTAL AMOUNT DUE				0.00
TOTAL AMOUNT TO BE PAID BY MANAGED CARE:				**$0.00**

DATE TO SCU_____ SCU#_____ REVIEWED BY_____

CALIFORNIA CHILDREN SERVICES/DENTAL WAIVER 2.15%

CMS 64.9 WAIVER DATA	TITLE XIX		TITLE XXI	
	W-2.15%	NW-97.85%	W-2.15%	NW-97.85%
ENHANCED TITLE XIX (HF)	$0.00	$0.00		
REFUGEE ONLY (100% FEDERAL)	$0.00	$0.00		
FFP	$0.00	$0.00	$0.00	$0.00
TOTAL	$0.00	$0.00	$0.00	$0.00

2.4 Medi-Cal Dental Services Branch (MDSB)

2.4.1 Business Overview

In order to determine Delta Dental's monthly Pure Premium Fund (PPF) payment amounts, the DHS-ITSD sends the FAM110 file to MDSB and Delta Dental. The FAM110 file lists the number of eligible beneficiaries by Aid Code. Delta Dental prepares two invoices each month, one for the "All Others" eligible category and one for the "Refugees" eligible category, based on appropriated contracted aid codes and the number of associated beneficiaries and submits the invoice to MDSB. MDSB validates the invoiced amount and submits the PPF payment invoice to the FMB Accounting Section to initiate the actual PPF payment process.

2.4.2 Business Specifications

Implementation of the 820 Transaction will have no adverse effect on MDSB internal business processes.

2.5 Third Party Liability Branch (TPLB)

2.5.1 Business Overview

The premium payment process for the HIPP program for eligible beneficiaries starts with an invoice, which is generated from the HIPP/BCCTP Database. This invoice is attached to a copy of the insurance carrier's premium notice or documentation of payment provided by the beneficiary and sent to the DHS-FMB-Accounting Section as a request for payment.

The HIPP staff also handles the premium payment process for eligible State-only BCCTP beneficiaries. This process is similar to the process for making premium payments under HIPP. The HIPP/BCCTP Database generates an invoice that is attached to a copy of the insurance carrier's premium notice and is then sent to the DHS-FMB-Accounting Section.

The Medicare Operations Unit (MOU) generates an invoice from the Medicare+Choice (M+C) Extract and sends the payment request to the DHS-FMB-Accounting Section. The M+C Extract is created from a process that starts with The Center for Medicare and Medicaid Services (CMS) sending a Finders File that contains individuals with Medicare HMO plans, to DHS-ITSD. ITSD runs the Finders File against the Medi-Cal Eligibility Data System (MEDS) in order to identify dual eligible members. ITSD extracts matches into the BYN350 system. MOU retrieves the file from ITSD in order to initiate enrollment into the M+C Premium Payment program.

2.5.2 Business Specifications

Implementation of the 820 Transaction will have no effect on the HIPP, BCCTP and M+C Premium Payment programs internal business processes.

3 Technical Specifications

The functional specifications are used to describe a product's or system's intended capabilities, appearance, and interactions with users and systems. The functional specifications act as a guideline and continuing reference point as the developers write the programming code.

Typically, the functional specifications for an application program that has a series of interactive windows and dialogs with a user would show the visual appearance of the user interface and describe each of the possible user input actions and the program response actions. The functional specifications may also contain formal descriptions of user tasks, dependencies on other products, and usability criteria.

There are several hardware and software requirements necessary in order to develop, test, and deploy applications for the 820 Transaction project. Software requirements include both mainframe and server based software applications while hardware requirements are centered on the client-server platform.

3.1.1 Assumptions and Requirements

These functional specifications presume that DHS obtains and uses *djengine*® from **Pervasive Software, Inc.** This software is an ETL product that will be used to convert the CMS64 extract file into a HIPAA compliant 820 Transaction on a client-server platform. Other assumptions that support this functionality are as follow:

- A client-server platform is available to the development staff.
- The development-mapping product is resident on client-server based platform.
- The transformation engine licensing is available for two separate machines - Development and Production.

Document Schema Designer® from **Pervasive Software, Inc** is also required to generate mapping schemas. **Attachment H - Pervasive Software** presents the product mix and sample pricing structure for the software licenses, yearly maintenance subscription, and telephone support obtained through CAL-Store.

The presumption is made that the compliance-checking software, *XEngine*® from **Edifecs, Inc.,** is available in the Development environment in order to allow proper testing of the compliant transaction prior to implementation. Additionally, another software product from **Edifecs Inc,** *SpecBuilder®,* is required on a Development machine and is used to generate an 820 Transaction Companion Guide. The Companion Guide is used to convey usage and functionality of the 820 Transaction to all DHS trading partners. It specifically defines the Looping structures, Segments and Elements used to communicate the premium payment for insurance products information that is peculiar to DHS operations and includes local code usage.

Further presumptions are made that existing secure FTP methodologies for delivering files to health plans will be used to deliver the 820 Transactions.

The DHS Companion Document is contained in a separate document entitled *CA-DHS Companion Guide – Payroll Deducted and Other Group Premium Payment for Insurance Products*. The document was generated using **Edifecs, Inc**. *SpecBuilder®* software.

Also required are skilled resources that have the requisite knowledge of the transformation tools, compliance-checking software, EDI data structures, CMS64, CalSTARS, Medi-Cal system, system communication protocols, and client-server platform specific knowledge.

3.1.2 Architecture and Data Flow Diagrams

Figure 4 -- Development Environment and **Figure 5 – Production Environment** depict the high-level architecture and data flow for the development, test, and production environments.

Figure 4 -- Development Environment

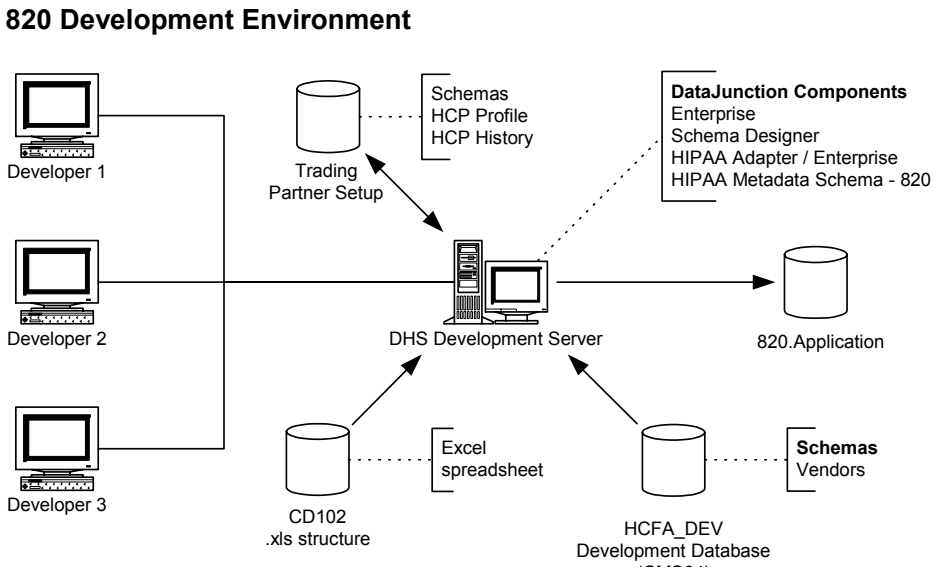
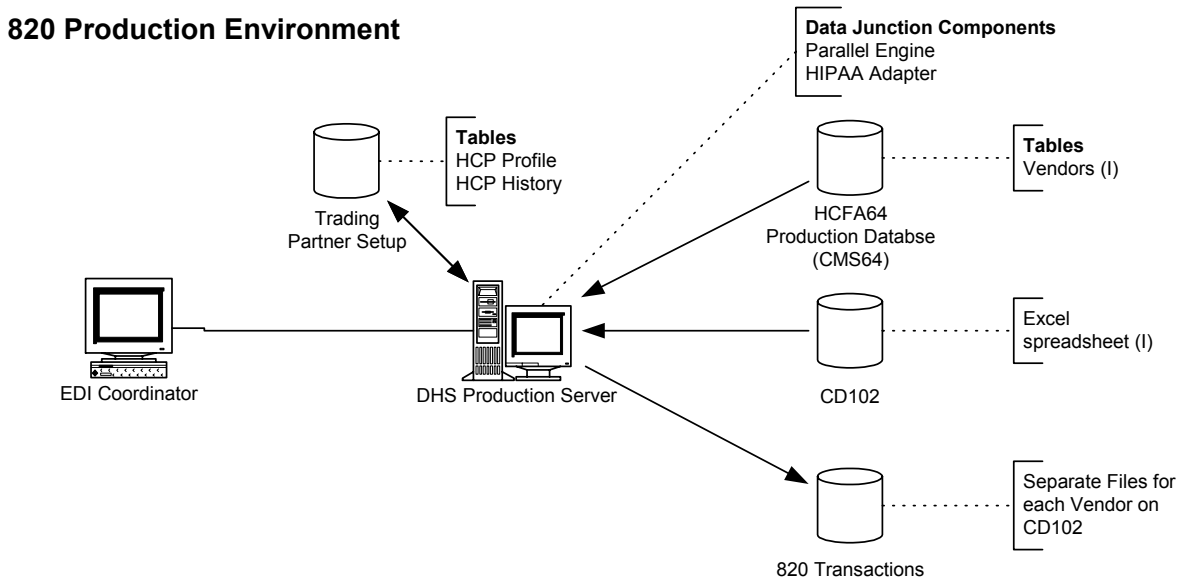


Figure 5 – Production Environment



3.2 Development Environment

The development environment is totally contained on the client-server platform. The following is a description of software and hardware requirements.

3.2.1 Client-Server

Software Requirements

Mapping Tool – *Document Schema Designer*® by Pervasive Software

Document Schema Designer®, is GUI-based software that provides visual mapping of data from one format to another. Application executables are created from these mappings, which may exist on either client-server or mainframe platforms.

Document Schema Designer® can transform all formats that contain some field and record orientation such as binary and flat files, ISAMs and record managers, databases (non-SQL), SQL and ODBC, spreadsheets, etc. The mappings are actually created from source data structures such as file schemas, COBOL copylibs, variable blocked mainframe files and many other types of data structures.

The data sources needed to create an 820 Transaction reside as different file formats. The mapping tool must be flexible enough to accommodate multiple input sources that may reside as SQL tables, VSAM files, DB2 databases, excel spreadsheets, or ASCII flat files.

Document Schema Designer®, works in conjunction with other related Pervasive software – *HIPAA Adapter*® and *HIPAA Metadata Schema*®.

Compliance Checking Tool – *XEngine*® by Edifecs

DHS will utilize *XEngine*® from **Edifecs, Incorporated** as a software solution for 820 Transaction compliance checking. The *Xengine* product runs on *Windows,* UNIX, and IBM mainframe platforms.

The 820 Transaction will be tested using the compliance-checking tool prior to implementation with the HCP. The purpose of the compliance-checking tool is to validate the 820 Transactions produced against existing HIPAA standards.

The compliance tool is capable of validating to multiple releases of the same HIPAA 820 Transaction Implementation Guide. The compliance-checking tool is also capable of validating to all seven Types of testing as defined by the Workgroup for Electronic Data Interchange/Strategic National Implementation Process (WEDI/SNIP) in their white paper.[1]

The compliance-checking tool is able to distinguish and differentiate which Type of testing has been violated. Downstream processes will differentiate between those errors that are informational and may be passed on to the HCP versus those errors that are severe and must be resolved before sending the transaction set on to the HCP. For those 820 Transaction files with severe errors an error report is generated and that 820 Transaction file is suspended from the file transmission process.

Software Inventory

Table 3 - Client-Server Software provides a listing of the vendor-related client-server software required to support the mapping processes on the development platform.

Table 3 - Client-Server Software

WIN/NT Platform
DJ Enterprise Edition, Multi-threaded
HIPAA Adaptor
HIPAA Metadata Schema
Document Schema Designer
Parallel Engine, WIN/ENT
HIPAA Adaptor, Enterprise Edition

[1] *Transaction Compliance and Certification, A white Paper Describing the Recommended Solutions for compliance Testing and Certification of HIPAA Transactions*, WEDI SNIP Transactions Workgroup – Testing Sub Workgroup, 08/26/02 – [http://www.snip.wedi.org].

Hardware Requirements

A client-server platform based on the *Windows*© operating system is required to support the ETL software *development* tool (*Document Schema Designer*®). *Document Schema Designer*® is GUI-based software that provides mapping of data from one format to another. Application executables are created from these mappings, which may then reside on either client-server or mainframe platforms.

The vendor-specified minimum server hardware requirements are:

Document Schema Designer

- PC with 486 or higher processor
- Windows 95/98/ME/2000/XP/NT 4.0 (Service Pack 5 or higher recommended)
- 30MB of available free hard drive space
- One CD ROM drive for installation
- 128MB of RAM

Table 4 – DHS-ITSD Standard Server Configuration shows the standard server configuration as provided by DHS-ITSD Network Support. A server is required to host the development-mapping tool for the 820 Transaction. Hosting may be provided through existing ITSD servers or as a new procurement through CAL-Store.

Table 4 – DHS-ITSD Standard Server Configuration

Type	Make	Model
		Hardware - Standard Server
Standard Server	HP	ML370R G3 Xeon 2.8GHz/512MB/512kb-5u/10/100/1000 PCI-X Gigabit NIC/5U
2nd processor	HP	Xeon 2.8GHz/512k processor option kit
SCSI RAID Controller	HP	Smart Array Controller 642
SCSI RAID Controller	HP	64 MBEnabler
Disk Drives	HP	Ultra3 36.4GB univ. hot plug (1”), 10k rpm
Power Supply	HP	Hot plug redundant power supply (ML370)
Fans	HP	Redundant hot plug fan kit
Warranty	HP	DHS Service Contract ML370R G3 9x5x4service for 3 years
Warranty	HP	DHS Contract 9x5x4 ML370R G3 for 9x5x4 service for 4th year only
		Rack & Accessories
Rack	HP	10636 rack (36U)
Rack	HP	9136 baying kit
UPS	HP	UPS R1500 XR
UPS	HP	Multi server option card for UPS
Monitor	HP	17” monitor (V7550),1yr. Parts/Labor/On-site
Monitor	HP	Monitor/utility fixed shelf
Keyboard Drawer	HP	Keyboard drawer opal (1U)
Keyboard/Mouse	HP	Integrated keyboard/trackball
KVM Switch	HP	8-port KVM switch
KVM Switch	HP	12 Ft CPU to switch KVM cable kit (one per server)

Table 5 – DHS-ITSD Standard Server Software Configuration shows the standard server software configuration as provided by DHS-ITSD Network Support.

Table 5 – DHS-ITSD Standard Server Software Configuration

Type	Make	Model
OS	MS	Microsoft - Win2003 Server Standard MVL License
Anti Virus	Symantec	Anti-Virus
Backup	Veritas	Backup Exec NT/2000 Remote agent
Backup	Veritas	Backup Exec NT/2000 Open File Option
Management	HP	Management Agents
Management	HP	Survey Utility
Management	HP	Version Control Agent
Inventory Management	MS	SMS
Reader	Adobe	Acrobat 4.0
		Software - SQL Database Server (in addition to Tier 1)
Database	MS	SQL Server 2000
		Software - Web Server (in addition to Tier 1)
Web Server	MS	IIS 5.0
Content Management	MS	Site Server
Web Publishing	MS	Web Publishing Wizard 1.52
Web Scripting	MS	Windows Scripting Host

Table 6 – DHS-ITSD Standard Server Utilities shows the DHS-ITSD required standard server utilities.

Table 6 – DHS-ITSD Standard Server Utilities

Type	Make	Model
Management		Dameware
Patch Deployment		Update Expert
Server Name Display		BGInfo

Table 7 – DHS-ITSD Standard Software And Maintenance Contracts shows the usual and customary software and maintenance contracts available on a standard DHS-ITSD server.

Table 7 – DHS-ITSD Standard Software And Maintenance Contracts

Maintenance
DHS Service Contract 9x5x4 3 years
DHS Contract 9x5x4 4th yr out of warranty
Software
Microsoft - Win2003 Server Standard MVL License
Veritas - BackUp Exec 9.0 NT/2000 Open File Option
Veritas Back Up Exec 9.0 NT/2K Remote agent
Rack & Accessories
HP - 10636 rack (36U)
HP - 17” monitor (V7550),1yr. Parts/Labor/On-site
KVM switch 8 port
HP - monitor/utility fixed shelf
HP - keyboard drawer opal (1U)
HP - integrated keyboard/trackball
HP - UPS R1500 XR
HP - 12 Ft CPU to switch cable kit (one per server)
HP - 9136 baying kit
HP - Multi server option card for UPS

3.2.2 Mainframe

Software Requirements

There are no mainframe software requirements in the development environment.

Hardware Requirements

There are no mainframe hardware requirements in the development environment.

3.3 Production Environment

The production environment is hosted entirely on the client-server. There are no mainframe software or hardware requirements. Below are listed the software and hardware requirements for the client-server.

3.3.1 Client-Server

Software Requirements

Integration Engine – *djengine* by Pervasive Software

The Integration Engine (*djengine*)® resides on the client-server platform and executes under the WIN/NT operating system. The Integration Engine runs as a service and provides the interface for launching the applications created from the mapping product *Document Schema Designer*.

Software Inventory

Table 8 - Client-Server Software provides a listing of the vendor-related client-server software required to support the production processes on the client-server platform.

Table 8 - Client-Server Software

WIN/NT Platform
DJ Enterprise Edition, Multi-threaded
Parallel Engine, WIN/ENT
HIPAA Adaptor, Enterprise Edition

Hardware Requirements

The client-server production hardware requirements are the same as those defined for the client-server development environment.

3.3.2 Mainframe

Software Requirements

There are no requirements for mainframe applications.

Hardware Requirements

There are no requirements for mainframe hardware.

3.4 Detailed Specifications

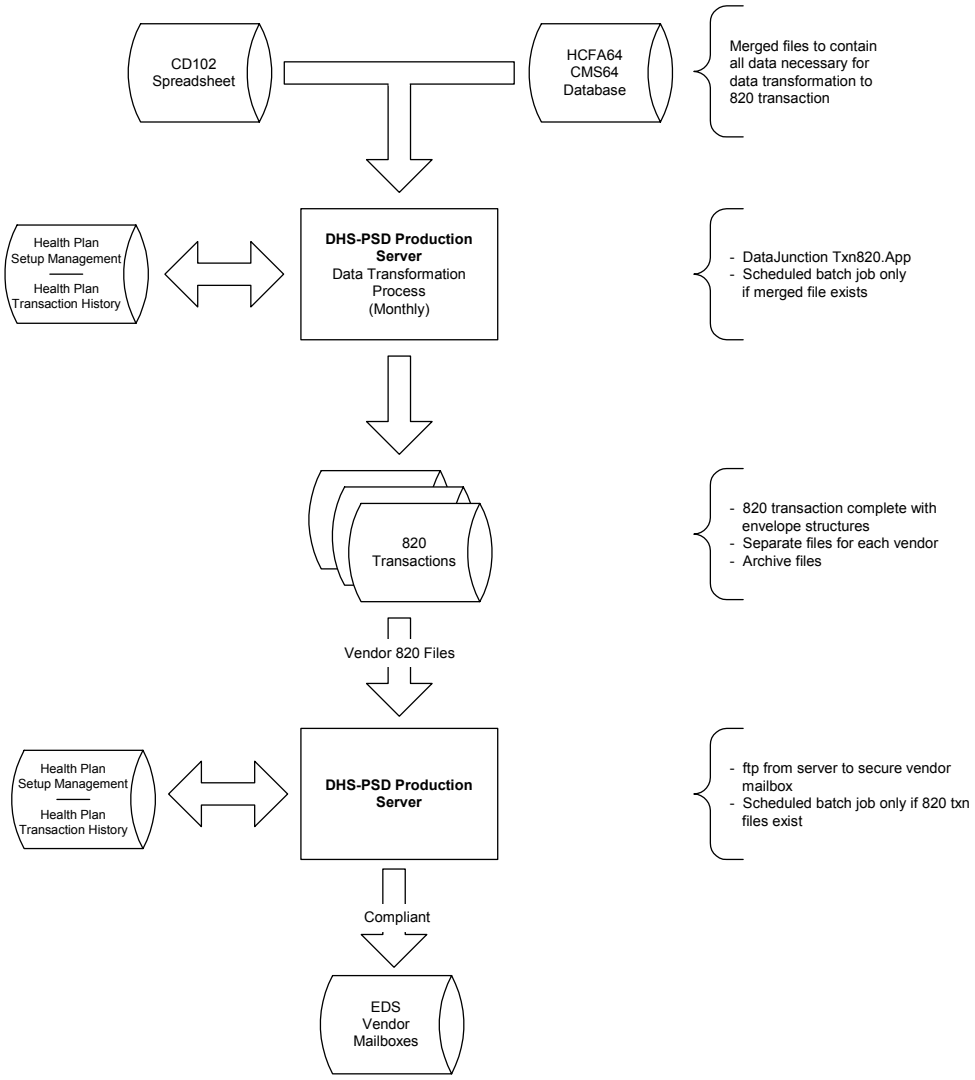
3.4.1 Purpose

The structure of the programming (for example, major groups of code modules that support a similar function) is described visually in the next section, as a general overview only.

3.4.2 Data Flow Diagrams

Figure 6 -- Data Flow Diagram represents the flow of data beginning with a merge of the existing CD102 Excel spreadsheet with related CMS64 Vendor table entries. The merged file is then used as input into the data transformation engine from which 820 Transaction files are created. The HIPAA compliant 820 transactions are then sent to the Vendor.

Figure 6 -- Data Flow Diagram



3.4.3 File Layouts

There are six files used in the creation of an HIPAA 820 Transaction:

1. Input/Output – Health Plan Setup Management file; refer to **Attachment B – Health Plan EDI Management File**
2. Output – Health Plan Transaction History file; refer to **Attachment C – Health Plan Transaction History File**
3. Input – CMS64 Vendor table; refer to **Attachment D -- CMS64 Database - Vendors Table**; this table requires additional fields
4. Input – CD102 File; refer to **Attachment E -- CD102 Excel Schema**
5. Output – Merged Extract File
6. Output - HIPAA 820 Transaction, refer to separate document entitled *820 Transaction Companion Guide*.

New Files

Health Plan Setup Management file – is used as a repository for trading partner (HCP) administration and contact information. This is a keyed file linked to the Health Plan Transaction History file and the CMS64 Extract file. There are 16 fields in this file and the structure and usage of each of these fields is defined in **Attachment B – Health Plan EDI Management File**. This file is maintained using the TradingPartnerMaintenance screen. The file is also updated through the HIPAA_820_Create process. Maintenance and update processes are defined in Section Health Plan Setup and Maintenance

Health Plan Transaction History – contains audit-tracking information as to when an 820 Transaction file was created for each Health Plan. The file is updated through the HIPAA_820_Create process each time a complete 820 Transaction file is created for the Health Plan. There are nine fields in this file and the structure and usage of each of these fields is defined in **Attachment C – Health Plan Transaction History File**. The contents of the file may be viewed on the TradingPartnerHistory screen. Screen options are presented for Searching or Sorting on any of the displayed fields.

3.4.4 Data Dictionary

The data element dictionary for both the Health Plan Setup Management file and the Health Plan Transaction History file may be found in **Attachment F -- Data Element Dictionary**. The dictionary provides field descriptions for each data element used in the two files. For ease of use the dictionary is alphabetized and the structure of the dictionary is as follows:

- Field Name – unique identifier of each field
- Length of Field – field length in bytes
- Default Value – the default is set when data is unknown of whenever the field is first initialized
- Allowable Values – coded values used in field; only provided if restricted to specific codes
- Definition of field – description, meaning and usage of the data contained in the field

3.4.5 Programs/Processes

There are two processes involved in generating an 820 Transaction:

1. The first process, Health Plan Setup and Maintenance, is a support system.

2. The second process, HIPAA 820 creation, involves the actual generation of the 820 Transaction from the CMS64 Database extract.

3.4.5.1 Health Plan Setup and Maintenance

The purpose of this process is to provide a mechanism for adding, changing, and deleting Health Plan contact information in the Health Plan Setup Management File. The file serves as a repository for Health Plan contact data and it also contains identifiers and control fields used in the generation of an 820 Transaction.

The control fields and identifiers are used in the Interchange Control Header (ISA) and Interchange Control Trailer (IEA) segments and in the Functional Group Header (GS) and Functional Group Trailer (GE) segments. The control fields, once initialized during the setup process are continually incremented via the HIPAA 820 Creation process. The control fields provide a means to uniquely identify an 820 Transaction for every Health Plan.

Inputs

The DHS EDI Coordinator provides the DHS Electronic Data Transmission form to the Health Plan EDI Coordinator. After the form is returned to DHS the DHS EDI Coordinator then enters the information into the Health Plan Setup files using data entry screens.

Input-Outputs

The Health Plan Setup Management file is accessed as an input-output file. The Trading Partner Interchange Control Number and Trading Partner Group Control Number are used as inputs in building the envelope and control segments (ISA, IEA, GS, GE). After the entire 820 Transaction is built including the envelope and control segments, the Trading Partner Interchange Control Number and Trading Partner Group Control Number are incremented by ‘1’ and updated on the Health Plan Setup Management file.

Outputs

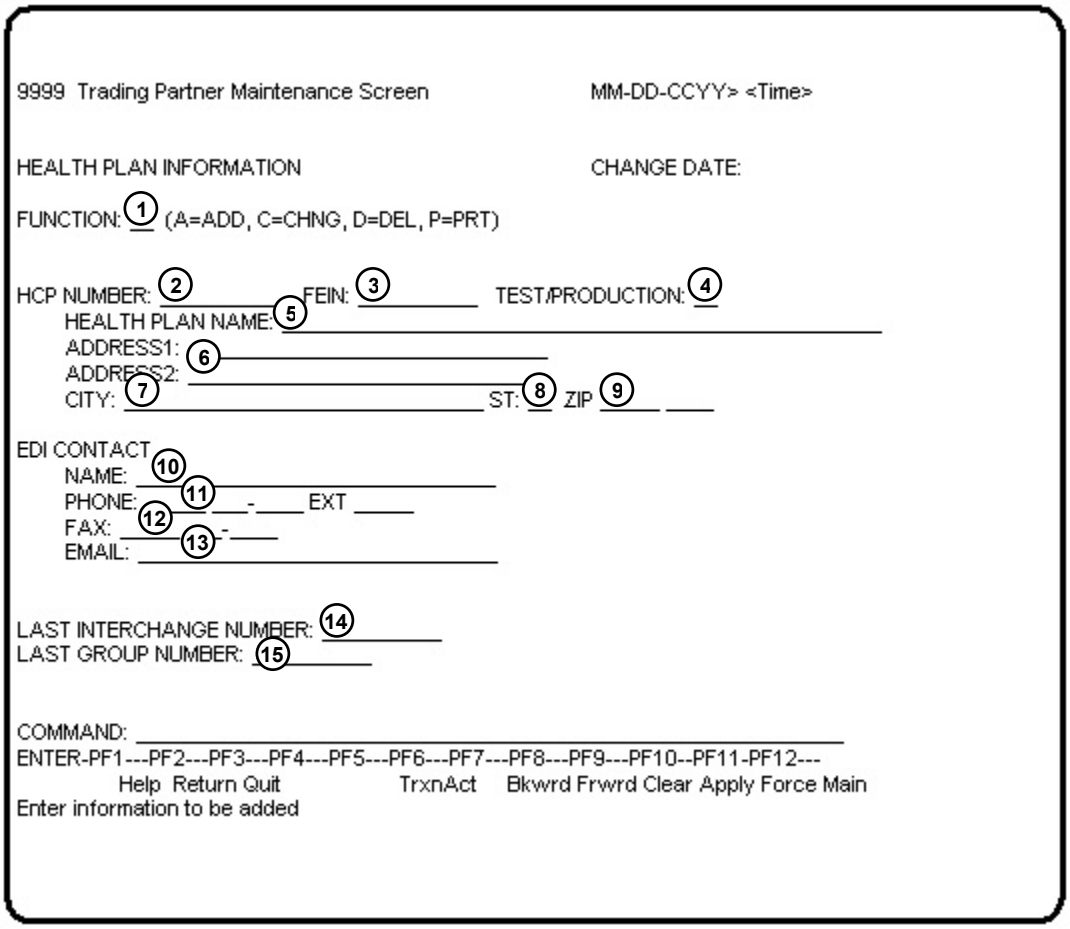
There are no outputs from this process.

Screens

There are two new client-server screens required to support the setup and administration of Trading Partners (Health Plans).

Figure 7 - Trading Partner Maintenance Screen – this screen is used to initially setup Trading Partner contact and identification information. This is a display/update screen. The key is HCP Number. The data source is Health Plan Setup Management file.

Figure 7 – Trading Partner Maintenance Screen

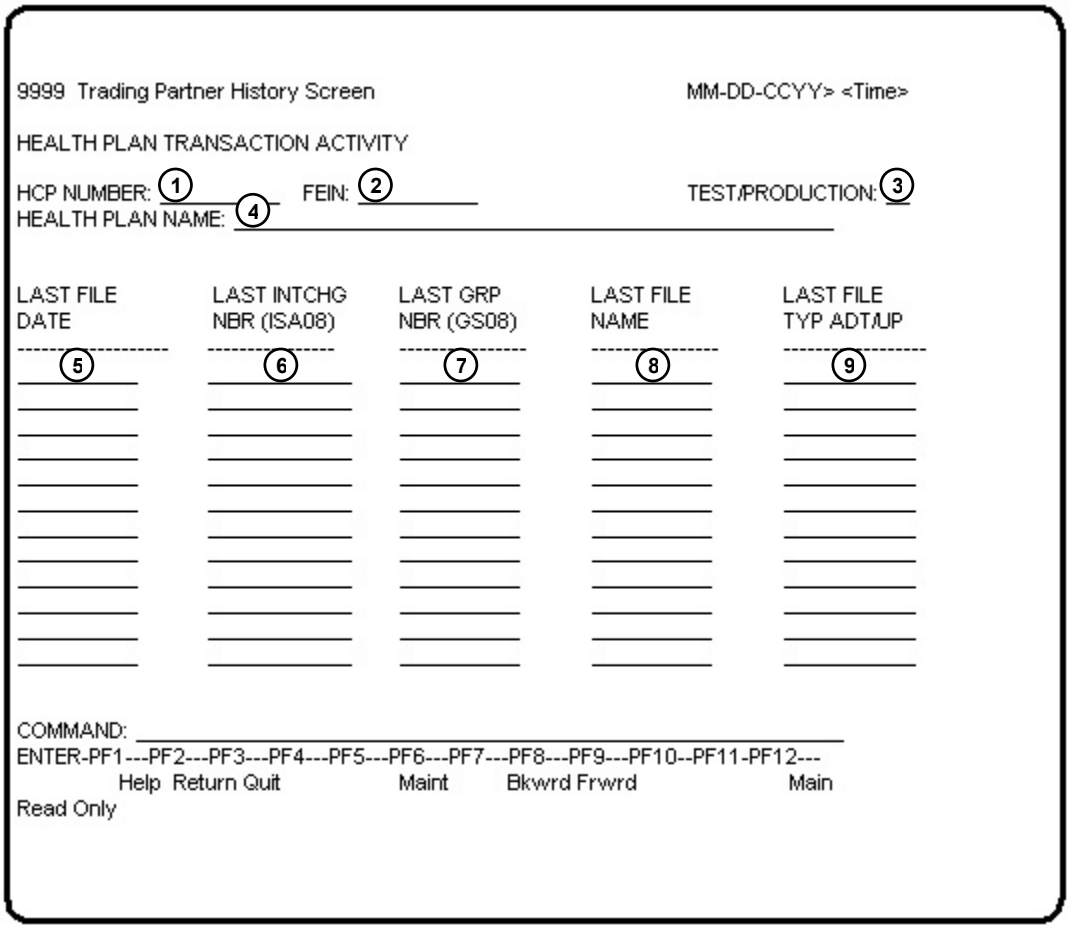


Trading Partner Maintenance Screen - Field Definitions

1. Function – 1-character field. Add, Change, Delete a Trading Partner to the HCP_Profile table
2. Vendor Number – 12-character number and suffix; assigned by each agency
3. FEIN – 9 character field; Federal Employer Identification Number assigned by the Federal Government to each Health Plan
4. Test/Production – 1-character field; used to indicate whether 820 Transactions are for test or production. Valid values are 'T' or 'P'.
5. Health Plan Name – 30-character field; name as assigned by MMCD
6. Address – 30-character field; mailing address as supplied by Health Plan EDI Coordinator
7. City – 25-character field; city as supplied by Health Plan EDI Coordinator
8. State – 2-character field; state code as supplied by Health Plan EDI Coordinator
9. ZIP – 10-character field; zip code as provided by Health Plan EDI Coordinator
10. EDI Contact – 30-character field; full name of Health Plan EDI Coordinator
11. Phone – 10-character field; telephone number of Health Plan EDI Coordinator
12. FAX – 10-character field; FAX number of Health Plan EDI Coordinator
13. Email – 30-character field; email address of Health Plan EDI Coordinator
14. Last Interchange Number – 9-character field; used to uniquely identify each 820 Transaction; this value is used in the ISA13 data element; the value is incremented by 1 each time a new 820 Transaction set is created.
15. Last Group Number – 9-character field; used to uniquely identify each 820 Transaction Group; this value is used in GS06 and GE02 data elements; the value is incremented by 1 each time a new 820 Transaction functional group is created.

Figure 8 - Trading Partner History Screen – this screen is used to display all transaction activity for the Trading Partner. This is a display only screen. The key is HCP Number. The data sources are Health Plan Setup Management file and Health Plan Transaction History file.

Figure 8 – Trading Partner History Screen



Trading Partner History Screen - Field Definitions

1. Vendor Number – 12-character vendor number and suffix; assigned by each agency
2. FEIN – 9 character field; Federal Employer Identification Number assigned by the Federal Government to each Health Plan
3. Test/Production – 1-character field; used to indicate whether 820 Transactions are for test or production. Valid values are 'T' or 'P'.
4. Vendor Name – 30-character field
5. Last File Date – 8-character date field; displays the date an 820 Transaction was last sent to the Health Plan
6. Last Interchange Number – 9-character field; used to uniquely identify each 820 Transaction; this value is used in the ISA13 and IEA13 data elements; the value is incremented by 1 each time a new 820 Transaction is created.
7. Last Group Number – 9-character field; used to uniquely identify each 820 Transaction Group; this value is used in GS06 and GE02 data elements; value is incremented by 1 each time a new 820 Transaction functional group is created.
8. Last File Name – 30-character field; unique file name of 820 Transaction.
9. Last File Type – 1-character field; used to identify whether file is a daily or monthly file; valid values are "2" or "4". This value is used in BGN08. **Note: This field is not applicable to an 820 Transaction.**

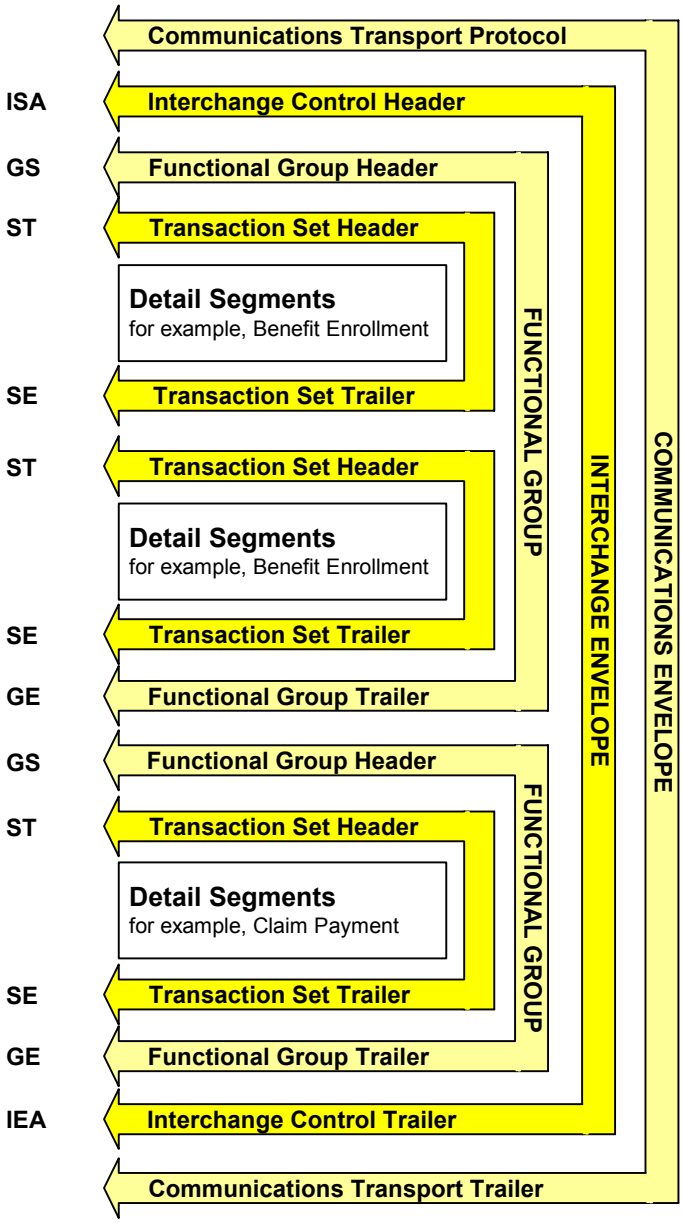
3.4.5.2 HIPAA 820 Creation (djengine)

The purpose of this process is to generate HIPAA compliant 820 Transactions. Inputs to this process include the CD102 spreadsheet, the CMS64 and the Health Plan Setup Maintenance File. Output is a fully developed 820 Transaction complete with envelope segments for each Health Plan contained on the FAME Extract file.

The 820 Transaction file is composed of a series of inter-related data segments and data elements. A data element corresponds to a data field in data processing terminology. The data element is the smallest named item in the ASC X12 standard. A data segment corresponds to a record in data processing terminology. The data segment begins with a segment ID and contains related data elements. A control segment has the same structure as a data segment; the distinction is in the use. The data segment is used primarily to convey user information, but the control segment is used primarily to convey control information and to group data segments.

The sequence of the elements within one segment is specified by the ASC X12 standard as well as the sequence of segments in the transaction set. Similar transaction sets, called 'functional groups,' can be sent together within a transmission. A group start segment prefaces each functional group; and a group end segment terminates a functional group. One or more functional groups are prefaced by an interchange header and followed by an interchange trailer; **Figure 9 -- Transmission Control Schematic** illustrates this interchange control.

Figure 9 -- Transmission Control Schematic



Inputs

The CMS64Extract file is used as input to this process. The CMS64 Extract file is created from merging both the CD102 and CMS64 database. The merged output is used as input to this process.

Input-Outputs

The Health Plan Setup Management file is accessed as an input-output file. The Trading Partner Interchange Control Number and Trading Partner Group Control Number are used as inputs in building the envelope and control segments (ISA, IEA, GS, GE). After the entire 820 Transaction is built including the envelope and control segments, the Trading Partner Interchange Control Number and Trading Partner Group Control Number are incremented by '1' and updated on the Health Plan Setup Management file.

Outputs

There will be one complete 820 Transaction Set for each vendor. Each 820 Transaction Set for a vendor may contain multiple organization summary remittance detail transactions.

Logic Flow Process

This high-level psuedo-code describes the logic for generating a HIPAA 820 Transaction using the defined inputs and outputs. **Attachment G – 820 Transaction Functional Modeling Diagram** graphically shows the functional logic.

```
StartJob
StartProc
Initialize switches, flags, and counters
        CMS64_PREV workspace
        ErrorOn
        AllSegmentsBuilt
        BuildEnvelopeComplete
        HeaderSegmentsBuilt
        InterchangeGroupHeaderBuilt
        InterchangeGroupTrailerBuilt
        Recordmatch
        MoreCMS64records
        SameVendor
Do GetCMS64extractRecord

DoWhile MoreCMS64records
        If CMS64_HeaderRecord
                Do BuildSegments
        EndIf
        Do GetCMS64extractRecord
EndDo

Do ClosingOperations
EndProc
EndJob

StartProc
BuildSegments
        Set AllSegmentsBuilt Off
        Set Error Off
        If NOT SameVendor
                If NOT InterchangeGroupTrailerBuilt
                        Do BuildTrailerSegments
                        Do BuildInterchangeGroupTrailer
                        Do CloseFile
                Endif

                Do OpenFile
                Do BuildInterchangeGroupHeader
```

```
                Set InterchangeGroupHeaderBuilt OFF
                Set InterchangeGroupTrailerBuilt OFF
                Do BuildHeaderDetail
        Else
                Do BuildHeaderDetail
        Endif
EndProc

StartProc
BuildInterchangeGroupHeader
        Do GetMatchingHealthPlanSetupManagment record
                If NOT RecordMatch
                        Set ErrorOn
                Else
                        Do BuildISA_Segment
                        Do BuildGS_Segment
                EndIf
EndProc

StartProc
BuildHeaderDetail
        If NOT HeaderSegmentsBuilt
                Do BuildTable1HeaderSegments
        EndIf

        Do BuildTable2OrgSummarySegments
        Do BuildTable2IndividualRemittanceSegments
EndProc

StartProc
BuildTrailerSegments
        Do BuildSE_Segment (Trailer)
EndProc

StartProc
BuildInterchangeGroupTrailer
        Do BuildGE_Segment
        Do BuildIEA_Segment
        Set InterchangeGroupTrailerBuilt ON
EndProc

StartProc
BuildTable1HeaderSegments
        Do BuildST_Segment  (Transaction Set Header)
        Do BuildBPR_Segment (Financial Information)
```

Do BuildTRN_Segment (Re-association Key)
Do BuildREF_Segment (Premium Receivers Identification Key)
Do BuildDTM_Segment (Coverage Period)
Do Build1000Loop (Receiver Sender Names)
EndProc

StartProc
Build1000Loop
Build Loop 1000A (Premium Receivers Name)
Do BuildN1_Segment (Premium Receivers Name)
Do BuildN3_Segment (Premium Receivers Address)
Do BuildN4_Segment (Premium Receivers City, State, ZIP)
Build Loop 1000B (Premium Payers Name)
Do BuildN1_Segment (Premium Receivers Name)
Do BuildN3_Segment (Premium Receivers Address)
Do BuildN4_Segment (Premium Receivers City, State, ZIP)
Do BuildPER_Segment (Premium Payers Administrative Contact
EndProc

StartProc
BuildTable2OrgSummarySegments
Build Loop 2000A (Organization Summary Remittance)
Do BuildENT_Segment (Organization Summary Remittance)

Build Loop 2300A (Organization Summary Remittance Detail)
Do BuildRMR_Segment (Organization Summary Remittance Detail)

Build Loop 2310 (Summary Line Item)
Do BuildIT1_Segment (Summary Line Item)

Build Loop 2315 (Member Count)
Do BuildSLN_Segment (Member Count)

Build Loop 2320A (Organization Summary Remittance Level Adjustment)
Do BuildADX_Segment (Organization Summary Remittance Level Adjustment)
EndProc

StartProc
BuildTable2IndividualRemittanceSegments
Build Loop 2000B (Individual Remittance)
Do BuildENT_Segment (Individual Remittance)

Build Loop 2100B (Individual Name)

Do BuildNM1_Segment (Individual Name)

Build Loop 2300B (Individual Premium Remittance Detail)
Do BuildRMR_Segment (Individual Premium Remittance Detail)
Do BuildDTM_Segment (Individual Coverage Period)

Build Loop 2320B (Individual Premium Adjustment)
Do BuildADX_Segment (Individual Premium Adjustment)

EndProc

StartProc
GetCMS64extractRecord
EndProc

StartProc
GetMatchingHealthPlanSetupManagmentt
EndProc

StartProc
CloseFile
EndProc

StartProc
OpenFile
EndProc

StartProc

ClosingOperations

EndProc

Tables

Vendor Table

The CMS64 database (HCFA64) vendor table requires modifications to include new fields. This table is currently updated by a Vendor File Replication (refer to **Attachment I - ITSD Vendor File Replication**) process, which is supported by ITSD. The mainframe extract criteria are defined in **Attachment J - Vendor File Selection Criteria**.

The following new field must be added to the vendor table:

- Vendor FEIN

CS_Invoice_Detail Table

The following new fields must be added to the CS_Invoice_Detail:

- Coverage Period
- Billed Amount

These fields are populated from the CMS64 Hand_Filed screen.

Cross Walks

Phase 3 – Gap Analysis and Requirements created a crosswalk between existing DHS-ITSD files and the 820 Transaction set. Refer to the document titled *Department of Health Services, Technical Requirements, 820 Transaction Project – HIPAA Integrated Requirements and Gap Analysis* for a detailed breakout of data mappings.

Reports

A report is generated from the HIPAA 820 Creation process, which details all transaction files created on a given processing day. This report shows by Vendor Number:

- Date and Time the report was generated
- Date the 820 Transactions were generated
- Vendor Number
- Vendor Name
- The Interchange Control Number as reported on the ISA13 element
- The Transaction Set Control Number as reported in the ST02 element
- An accumulated total of all Remittances for a given Vendor; this is a summation of all 'ENT' Segments

The reported is generated in Vendor Number sequence and is created at the end of HIPAA 820 Creation process.

Figure 10 -- 820 Transaction Run Control Totals represents the report layout for the *Run Control Totals* report.

Figure 10 -- 820 Transaction Run Control Totals

DEPARTMENT OF HEALTH SERVICES
INFORMATION TECHNOLOGY SERVICES DIVISION
820 TRANSACTION RUN CONTROL TOTALS

PROGRAM: RUN DATE: mm/dd/yy
REPORT NO: RUN TIME: hh/mm/ss
DATE: mm/dd/yyyy PAGE NUM: 999

INTERCHANGE CONTROL NUM (ISA13)	TRANSACTION CONTROL NUM (ST02)	VENDOR NUM (REF02)	VENDOR NAME (N102)	TOTAL SUMMARY REMITTANCES (ENT)
999999999	999999999	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	999,999
999999999	999999999	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	999,999
999999999	999999999	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	999,999
999999999	999999999	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	999,999
999999999	999999999	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	999,999
999999999	999999999	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	999,999
999999999	999999999	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	999,999
999999999	999999999	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	999,999
999999999	999999999	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	999,999
999999999	999999999	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	999,999

3.4.5.3 HIPAA 820 Compliance Checking (XEngine)

The outbound 820 Transaction will be tested using the compliance-checking tool prior to being implemented with the HCP. The purpose of the compliance-checking tool is to validate that the 820 Transactions produced by DHS will be compliant with HIPAA standards.

The compliance tool is capable of validating to multiple releases of the same HIPAA 820 Transaction Implementation Guide. The compliance-checking tool is also capable of validating to all seven Types of testing as defined by WEDI/SNIP in their white paper.[2]

Inputs

The inputs to this process are the individual 820 Transaction files generated in the HIPAA 820 Creation Process (*djengine*). Each file is passed in its entirety to the process.

Outputs

There are no output files generated in this process.

Tables

There are no new tables required.

Cross Walks

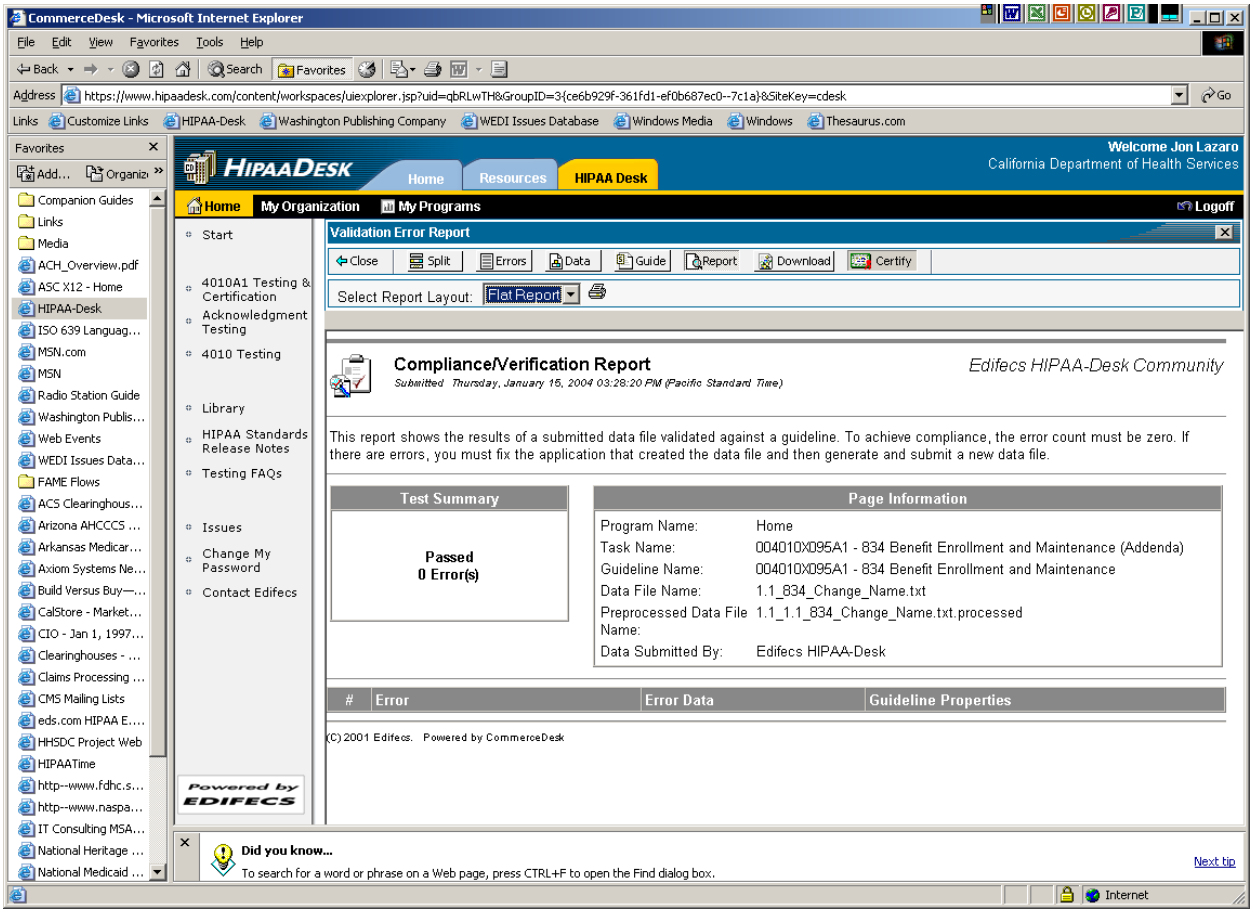
There is no cross walk required.

Reports

During testing, for each 820 Transaction file submitted through this process, a report is generated that shows the outcome of the compliance check. The desired outcome is to have no errors reported. A sample screen shot is depicted in **Figure 11 – Sample report when no compliance errors are detected**.

[2] *Transaction Compliance and Certification, A white Paper Describing the Recommended Solutions for compliance Testing and Certification of HIPAA Transactions*, WEDI SNIP Transactions Workgroup – Testing Sub Workgroup, 08/26/02 – [http://www.snip.wedi.org].

Figure 11 - Sample report when no compliance errors are detected



During testing, when compliance errors are detected then an error report is generated as depicted in the screen shot shown in **Figure 12 - Sample report when compliance errors are** detected**.** This is only a partial display, more information is presented in the error report as shown in **Figure 13 - Sample Detailed Error Report generated from Edifecs XEngine**.

Figure 12 - Sample report when compliance errors are detected

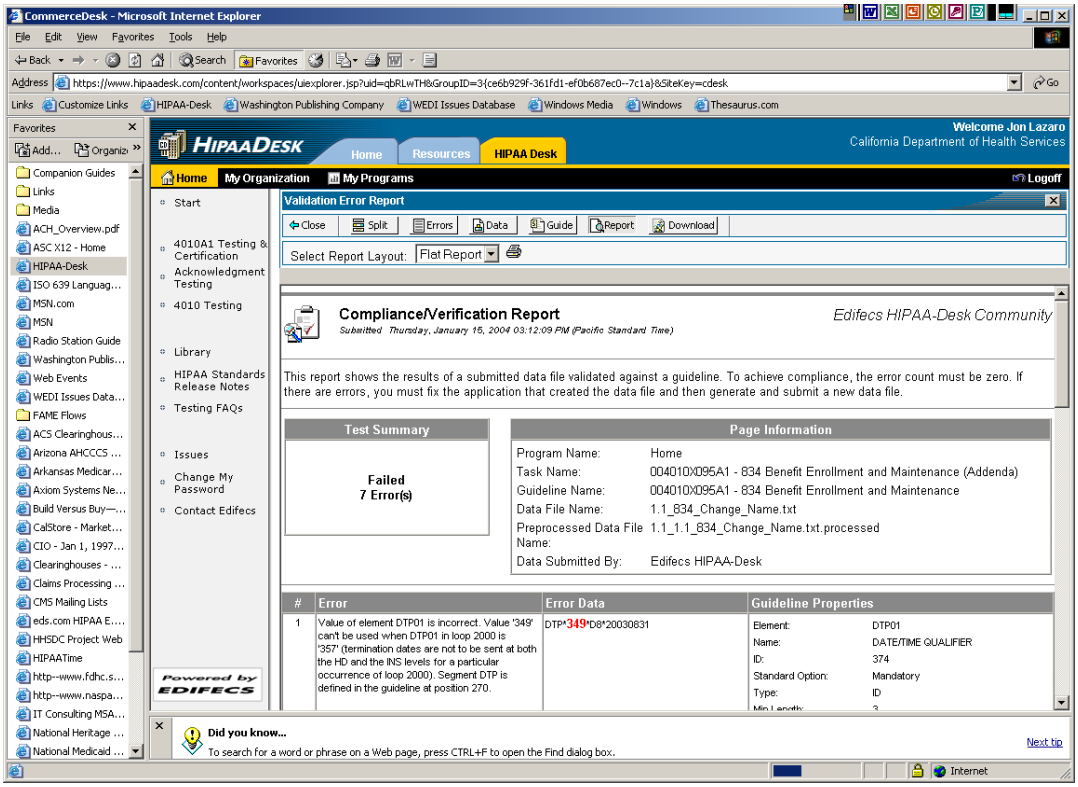
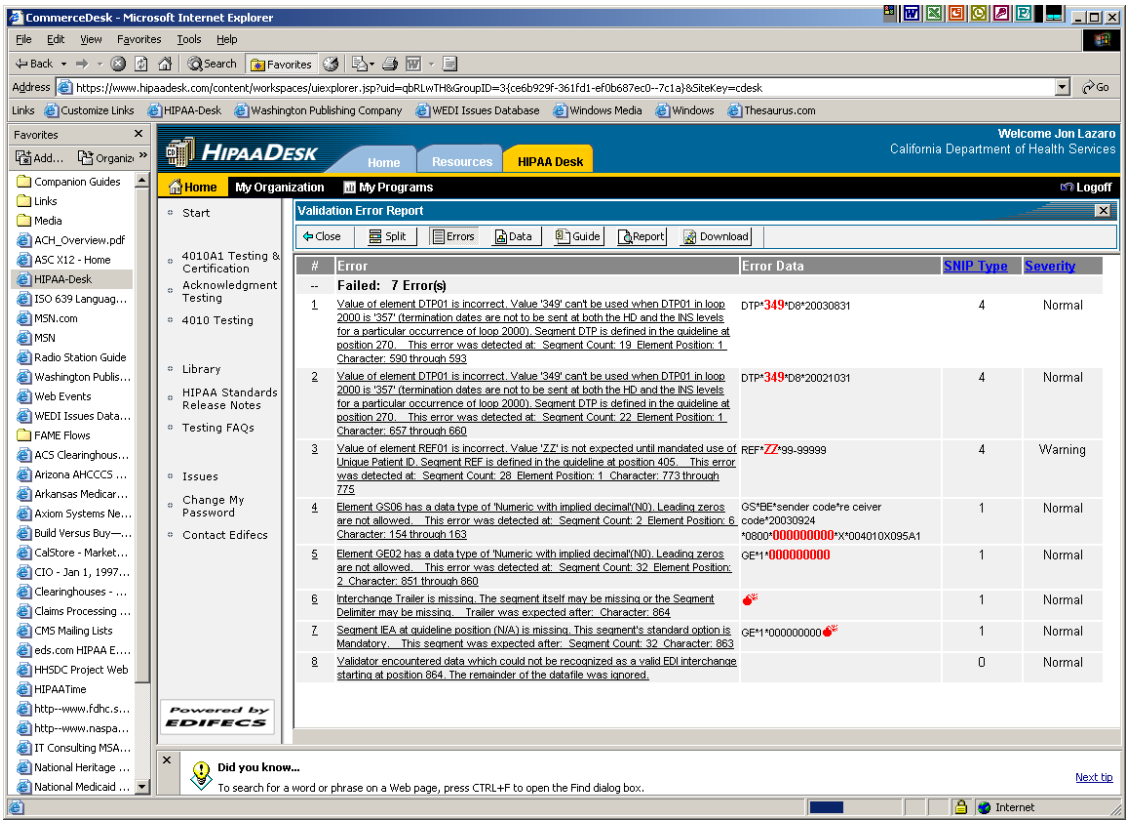


Figure 13 - Sample Detailed Error Report generated from Edifecs XEngine



3.5 Companion Document

The Companion Document is used to convey usage and functionality of the 820 Transaction to all DHS trading partners. It specifically defines the Looping structures, Segments and Elements used to communicate capitation and premium payment information that is unique to DHS operations. It may also include local code usage. The DHS Companion Document is contained in a separate document entitled *CA-DHS Companion Guide – 820 Capitation and Premium Payments*.

4 Risk Management Considerations

4.1 Risk Considerations for the 820 Transaction

Prior to executing *Phase 4 - Design and Specifications* of the 820 Transaction Project, *Phase 3 - Gap Analysis and Requirements* was completed. Phase 3 of the project included the review and documentation of several important intersections between HIPAA requirements and particular areas of the California Codes and Regulations that may be applicable to state agencies and/or their trading partners.

It is up to the affected program areas: PSD, ITSD, FMB, MMCD, MDSB, and TPLB to decide whether or not to execute changes in their business policies and more specifically, whether to implement Trading Partner Agreements.

The 820 Transaction Business Considerations in this document consist of risks to be considered in the remediation of the 820 Transaction for HIPAA compliance.

This list is not all-inclusive. The suggestions are offered as specific safeguards to minimize particular areas of risk related to implementation of the 820 Transaction. These suggestions do not constitute or replace legal advice.

4.2 Managing Technology Risk

The pace of technological change continues to accelerate. The average technical product development life cycle, from initial design to market readiness continues to decrease. The development of adequate laws to protect individuals, businesses, and government agencies (as consumers of technology products) from cyber crimes cannot keep pace with technological innovations.

The HIPAA statute was enacted when healthcare EDI transactions were sent through private networks and expensive, dedicated telephone lines (such as T-1 or T-3). The use of TCP/IP (Internet) transmission protocols was still relatively new, and the potential for inexpensive broadband connectivity between health plans and providers was several years away.

As the ease of electronic communications increases, the risk of network security breaches also increases. At the same time, the level of technical skill needed in order for an individual to successfully attack an entity's network (and alter, destroy, or disclose its confidential data) has substantially decreased. The patchwork of current federal and state laws to prosecute cyber-criminals may be inadequate, and the allowable penalties may not provide sufficient deterrence for these crimes.

The federal rulemaking process for approval of the draft and final rules for Transactions, Privacy and Security has taken a number of years to complete, and each of the regulations has its own compliance date. The 820 Transaction contains electronic protected health information, as defined in the final Security Rule, and appropriate security controls will need to be considered in the Transactions compliance strategy, even though compliance with all requirements of the Security Rule is not required until April 2005.

4.3 Managing Liability Risk

The terms of any existing EDI Trading Partner agreements should be reviewed. The HIPAA regulations do not explicitly require EDI agreements; however, they are commonly used and accepted as a standard of prudent business practice.

The current recommendations for these agreements are focused on transaction format and syntax rules, file size limitations, and other technical issues. The X12N recommendations for Trading Partner agreements are found in Section 1.1.1 of the ASC X12 820 Transaction Implementation Guides. This implementation guide does not require, or even suggest, including any safeguards that ensure the confidentiality, integrity and availability of EPHI.

It may be valuable to consider the addition of appropriate language to define ownership of the electronic data as it is transmitted across networks, specifying a partner's responsibility to notify other partners in the event of a security breach.

The 820 Transaction Rule does not define a trading partner, however, it does define a Trading Partner Agreement that indicates who the HHMS Secretary has identified as being a trading partner. A Trading Partner Agreement is an agreement related to the exchange of information in electronic transactions, whether the agreement is distinct or part of a larger agreement, between each party to the agreement. For example, a Trading Partner Agreement may specify, among other things, the duties and responsibilities of each party to the agreement in conducting a standard transaction.[3]

The following is a citation from a white paper, authored by Doug Renshaw of Highmark, in collaboration with the SNIP Business Issues Sub Work Group[4], which describes the business issues and recommended solutions associated with Trading Partner Agreements. As excerpted from that white paper:

[3]TCS Rule § 160.103 Definitions

[4] http://www.wedi.org/snip/public/articles/trading113000.pdf

Although not required under HIPAA, it recommended that health care entities that are exchanging HIPAA electronic transactions establish a Trading Partner Agreement that contains the types of items listed below. In addition, any privacy provisions that are required by the Privacy Rule should be included. It is recommended that this agreement be separate from any business arrangement agreement that may also be in place between the trading partners, such as a provider agreement or benefits program.

- *Communications details for establishing connectivity or for transmission of transactions. For example, a plan may specify that it offers dial-up connectivity for transaction submission, and then go on to explain how a trading partner would access corresponding responses, remittances, or other transactions from the plan.*
- *Testing requirements before live, production submissions will be accepted. This should include requirement for volume and type of test submissions as well as results that are expected prior to production submissions.*
- *Financial arrangements including, which partner is responsible for telecommunication costs and any other charges or fees that, may be applicable.*
- *Functions that are optional according to the HIPAA rule and standards. For example, in the preamble of the final rule, there is a response regarding payer-to-payer COB, and a statement that a trading partner agreement would be used to establish that business relationship. (page 50336)*
- *Security statements and requirements including encryption, electronic signatures, PKI, and equivalent considerations that be required by the Security Rule when it is finalized.*
- *Data clarifications that supplement the specifications in the Implementation Guide should be placed in a separate addendum to the main trading partner agreement. In that way, changes and updates can be made without changing the body of the trading partner agreement. Data clarifications must stay within the bounds set by the transaction rule in section 162.915 and can include the following:*
    - *Data elements where the Implementation Guide explicitly defers to other sources such as a contract or state law requirements.*
    - *Identifiers or codes where a national standard source is not recognized. An example of this would be provider identifier prior to the establishment of a National Provider Identifier. Until the implementation of the National Provider Identifier (NPI), the Trading Partner Agreement can specify that a certain code must be used, and accordingly a payer could specify that the State License Number must be submitted if that payer uses and needs that number to identify the provider.*

- *Parameters in the HIPAA specifications that provide for options for willing trading partners, such as on the number of claims within an 837-claim transaction. The maximum size is specified as 5,000 claims; however, there is a provision for a higher number if both trading partners agree. (837P, page 44) A similar situation exists for the 270/271 eligibility transactions where a batch transaction can have up to 99 patient requests, but willing trading partners can agree to a higher number. (270/271, page 14)*
- *Informational subsets of valid code values that are used in any of the receiver's systems or business processes. Transactions that include code values that are outside these subsets but are valid according to the HIPAA Implementation Guide may not be rejected as an invalid transmission, but may be rejected because of coverage or for other appropriate business reasons*.

The State of California Office of HIPAA Implementation (CalOHI) provides a sample Trading Partner Agreement on its Website at: http://www.ohi.ca.gov/calohi/docs/2003-33_Exhibit_2_TPA_Sample_Template.doc. A sample template is available in a separate document titled *Electronic Data Trading Partner Profile Form*.

5 Test Planning

There will be both internal (in-house) and external (user) testing for the additional new processes named here as the 'Remittance-Advice Process'.

5.1 In-House Testing

All in-house testing will follow a structured quality assurance approach. Testing activity coordination will be followed to test the development, installation, and use of all software remediation designed to help ensure integrity of the Remittance-Advice Process. All software testing plans, results and measurements will be documented throughout the testing process.

5.1.1 Unit Testing

Unit testing is the testing of the smallest piece of software, the underlying code itself. A *unit* is a subroutine, procedure, object, or program.

Technical staff will perform unit testing as they test their own code throughout the iterative development process. Their diligence will allow bugs and software discrepancies to be caught early, in a stage in which it is least costly, both in person hour time and dollars, to correct errors.

5.1.2 Component Testing

A *component* is an integrated aggregate of one or more units. Component testing refers to a program or a group of programs that make up a software module.

Each coded module will be tested to ensure that every as-built module behaves according to its specification as defined during the detailed design phase of the project.

As software development and/or modifications occur, software developers test their own code and walk through, in structured review sessions, each other's code. This ordered approach to development helps technical staff members verify their logic and development efforts.

5.1.3 Integration Testing

Integration testing is done with several components to ensure that these components operate successfully with one another. This tests the interaction of components and the interconnection of previously tested modules to ensure that the interlocked module sets behave as correctly as independent modules.

The developers who perform integration testing work together to share technical approaches and solutions, with system efficiencies being a by-product of the testing.

5.1.4 System Testing

A software system is a collection of programs that perform different, related functions. *System* testing focuses on those issues and behaviors that can be exposed by testing an entire, complete, integrated system. An appropriate testing environment will be defined prior to system testing in order to mirror the production environment as closely as possible.

System testing makes certain that an inclusive integrated software system embedded in its actual hardware environment behaves according to the functional requirements previously defined. System testing also includes *stress testing*.

Stress testing is high volume testing. Stress testing is not designed to identify errors in application software. It identifies errors in communications, the operating system, and/or database management system software that may affect overall application performance and/or throughput. Stress Testing:

- Ensures that a system will operate accurately during stress, with no data corruption;
- Determines what changes in the system, if any, may be required to accommodate an unanticipated volume; and
- Ensures that a system will degrade gracefully under the pressure of high volumes. That is, even as the system's response time increases, it will not make processing errors.

5.1.5 Regression Testing

Regression testing verifies that the software's functioning remains unchanged except for any intended changes that may arise in the future. Regression testing materials are developed from system tests and are used for testing future software releases.

After system testing is completed and a production version of the software is available, historical versions of the test data and the results are prepared. This provides the basis of comparison for regression testing of the next release of the software.

Regression testing begins by using the same test data as was used in system testing the previous release and by verifying that nothing has changed unless there was a planned change. If the test data can no longer be used because of the planned changes, the test data is modified minimally so the results come as close as possible to the previous release of the software. This regression testing verifies that the functioning of the system does not have unintended changes caused by planned and executed modifications.

5.2 External Testing

External testing includes the interoperability between an entity and its multiple trading partners. This business-to-business (B2B) testing is independent of compliance testing. However, once an entity has successfully completed compliance testing and is certified, this B2B testing should be only cursory and include only those lines of service that are applicable.

External testing may include the following types of testing:

Type	Test	Purpose
1	Load/Capacity/Volume	Ensures that the system will not fail because of increased file sizes or an increased number of transactions
2	File and data integrity	Tests files for completeness, inclusion of required data elements, and segment order
3	Outputs	Tests that output can be produced as required by the receiver of a transaction
4	Security	Tests security-related issues that may exist between trading partners

5.3 Beta Testing

User testing will begin with a limited number of Health Plans. The purpose of the Beta test is to ensure the External Testing processes are functional between DHS and the selected beta test Health Plans.

External beta test plans will be selected based on the size of plan and its ability to accept and process HIPAA 820 Transactions.

6 Resource Planning

6.1 Development and Testing Resources

820 Transaction Project team members will fulfill the activities of the following roles. One team member may serve in multiple development and testing capacities.

The Problem Report Tracking Database referred to below is a Remedy Help Desk managed and maintained by ITSD, accessible through the DHS Intranet.

Roles	Activities
820 Transaction Project Manager	OHC designated a dedicated Project Manager who will oversee and manage all remediation and implementation activities. ▪ The Project Manager will use available resources to help plan each testing activity and assemble key components (e.g. documentation, personnel and hardware) to ensure a successful and as needed a repeatable process. ▪ A database of test plans with State indicator will be created to facilitate a hierarchy of test requirements and cross-references the hierarchy to specific test cases, procedures, and any Problem Reports found while testing.
Application Development Team Members	The application development team will be responsible for the coding and unit testing of components developed in support of the 820 Transaction remediation efforts. Team members will be familiar with and understand EDI terminology, coding languages, and coding techniques
Test Lead	The Test Lead will track all Problem Reports in the Problem Report Tracking Database. The database will contain all collected data/information about each problem in software and hardware, including a description, symptoms, and severity.

Roles	Activities
Testers	Testers will enter Problem Report details into a hardcopy form, attaching any appropriate documentation. These hardcopy Problem Report forms can then be routed as assigned. The Test Lead will enter them into the Problem Reporting database.
Developers	Developers will review, recreate, and correct any found defects and determine appropriate solutions. After defects have been corrected, it is up to the developers to notify the Test Lead.

6.2 Production Resources

820 Transaction Production Resources will fulfill the activities of the following roles. One team member may serve in multiple capacities.

Roles	Activities
Contract Support Manager	The Contract Support Manager typically works with a defined list of Health Plans and coordinates the interactions between DHS and the HCPs. ▪ This function is currently supported by MMCD ▪ There are no additional support requirements of this resource.
EDI Coordinator	An EDI Coordinator is needed to monitor the daily and monthly 820 Transaction production runs for proper execution. This resource is responsible for setup and configuration of new health plans with which DHS exchanges 820 Transactions. The EDI coordinator interacts with the Contract Support Manager and the Health Plan's EDI Coordinator to solicit and collect information required for proper generation of an 820 Transaction. Information such as the HCP's EDI Coordinator contact name, telephone number, fax number, vendor Federal employee identification number, and interchange control number are all collected from the vendor via the Electronic Data Transmission Request form. The EDI coordinator also reviews EDI Transaction Error Reports and takes appropriate action.
Application Support Staff	The Application Support staff is responsible for applying updates to the mappings based on changes to ANSI X12 standards, changes in the HIPAA Implementation Guides, or to software updates for the ETL tool. ▪ Requisite skills include SQL Server knowledge, coding techniques, and database mapping skills.

7 Trading Partner Setup

It is anticipated that before any exchange of 820 Transactions with vendors is undertaken, a DHS Electronic Data Exchange Profile must be completed by the Health Plan and received by DHS. A DHS Electronic Data Trading Partner Profile Form is provided in a separate Word document entitled *Electronic Data Trading Partner Profile.*

7.1 Trading Partner Profiles

Health Plan contact information is collected by the DHS EDI Coordinator via a DHS Electronic Data Trading Partner Profile Form, which is submitted, to each vendor's EDI Coordinator. This questionnaire seeks vendor information that is required on the 820 Transaction and identifies a single point of contact within the vendor's organization that is responsible for data and communication issues. The Health Plan EDI Coordinator will complete the form and return it to the DHS EDI Coordinator.

7.2 Trading Partner Agreements

The final transaction rule does not expressly require Trading Partner Agreements. However, it is recognized that a Trading Partner Agreement is an appropriate tool to establish a relationship in which electronic data will be exchanged.

The Trading Partner Agreement is also a tool by which a covered entity will protect itself from non-compliance resulting from a business relationship in which a business partner fails to meet compliance.

If a decision is made to use a Trading Partner Agreement, consideration should be given to inclusion of:

- The entity with which DHS is entering into an agreement
- Communications details for establishing connectivity
- Testing requirements before live, production submissions will be accepted
- Security statements and requirements including encryption, electronic signatures, PHI, and equivalent considerations that may be required by the Security Rule

A Trading Partner Agreement must not:

- Change the definition, data condition, or use of a data element or segment in a standard
- Add any data elements or segments to the maximum defined data set
- Use any code or data elements that are marked “not used” in the standard’s implementation specification or are not in the standard’s implementation specification(s)
- Change the meaning or intent of the standard’s implementation specification(s)

8 Document Approvals

We have reviewed the document "*820 Transaction Project, Payroll Deducted and Other Group Premium Payment for Insurance Products, Integrated Design Specifications*" and hereby approve it as the official DHS position.

_____ Date_____

Victor Bianchini; Chief, DHS-Financial Management Branch, Accounting Section

_____ Date_____

Steve Soto; Plan Monitoring and Member Rights Branch Chief, Medi-Cal Managed Care Division

_____ Date_____

Shelley Thomas; Chief, DHS, Medi-Cal Dental Services Branch

_____ Date_____

Allan Schaden; Chief, DHS, Third Party Liability Branch

_____Date_____

Jeff Kemp, Chief, TPLB-Health Insurance Section

_____Date_____

Alan Muck, Chief, TPLB-Other Health Coverage Unit

_____Date_____

Eric Morikawa, Chief, TPLB-Analysis & Implementation Unit

_____Date_____

Margaret Hoffeditz, Chief, TPLB-Recovery Section

_____Date_____

Leanna Pierson, Chief, TPLB-Medicare Operations Unit

_____Date_____

Pam McBroom, Chief, TPLB-Cost Avoidance Unit

_____ Date_____

Russ Hart; IT Section Chief, DHS-PSD-Office of HIPAA Compliance

9 Attachments

Attachment A – Electronic Data Transmission Request Form

Attachment B – Health Plan EDI Management File

Attachment C – Health Plan Transaction History File

Attachment D -- CMS64 Database - Vendors Table

Attachment E -- CD102 Excel Schema

Attachment F -- Data Element Dictionary

Attachment G – 820 Transaction Functional Modeling Diagram

Attachment H - Pervasive Software

Attachment I - ITSD Vendor File Replication

Attachment J - Vendor File Selection Criteria

9.1 Attachment A – Electronic Data Transmission Request Form

California
Department of Health Services
Electronic Data Transmission Request Form

To expedite the setup process, please complete all fields.

COMPANY NAME:
FEIN / TAX ID:
ADDRESS:
CITY: STATE: ZIP:
TELEPHONE: FAX:
INTERCHANGE RECEIVER ID (ISA08):
DATE SENT TO DHS: TARGET START-UP DATE:
EDI CONTACT NAME: EDI CONTACT TELEPHONE: EDI CONTACT EMAIL ADDRESS:

REQUESTED TRANSACTIONS (check all that apply)

- ☐ 834 Enrollment Maintenance
- ☐ 820 Premium/Capitation Payment Remittance Advice

OTHER CLIENT REQUIREMENTS/COMMENTS

9.2 Attachment B – Health Plan EDI Management File

Field Name	Length	Start	End	PIC
Vendor_no (key)	10			X(10)
Identification Number	15			X(15)
Usage Indicator	1			X(1)
Federal Employer Identification Number (EIN)	9			X(9)
Contact Name	30			X(30)
Contact email	30			X(30)
Contact Telephone	12			X(12) 999 999-9999
Contact FAX	12			X(12) 999 999-9999
Last Interchange Control Number	9			9(9)
Last Group Control Number	9			9(9)
Transaction Type 1	3			X(3)
Transaction Type 2	3			X(3)
Transaction Type 3	3			X(3)
Transaction Type 4	3			X(3)

9.3 Attachment C – Health Plan Transaction History File

Field Name	Length	Start	End	PIC
Vendor no (key)	3			X(3)
Interchange Control Number	9			9(9)
Group Control Number	9			X(9)
Create Date	10			DATE
Total Transaction Count	9			9(9)
Transaction Type	3			X(3)
File Type	1			X(1)

9.4 Attachment D -- CMS64 Database - Vendors Table

Data Element Description	Format	Size
vendor_no	Alphanumeric	10
vendor_suffix	Alphanumeric	2
vendor_name	Alphanumeric	40
vendor_add1	Alphanumeric	39
vendor_add2	Alphanumeric	30
vendor_add3	Alphanumeric	30
vendor_city	Alphanumeric	15
vendor_state	Alphanumeric	2
vendor_cntry	Alphanumeric	12
vendor_zip	Alphanumeric	9
vendor_type	Alphanumeric	1

9.5 Attachment E -- CD102 Excel Schema

Field Name	SCH_NO	BEG_WARR	END_WARR	WARR_DATE	FFY	AMOUNT
Format	General	General	General	General	General	#,##0.00 -#,##0.00

9.6 Attachment F -- Data Element Dictionary

Business Address 1

Length: PIC:

Default Value: Allowable Values: any

Assigned by the Health Plan and collected by EDI Coordinator via the DHS Electronic Data Transmission Request Form.

Business Address 2

Length: PIC:

Default Value: Allowable Values: any

Assigned by the Health Plan and collected by EDI Coordinator via the DHS Electronic Data Transmission Request Form.

Business Name

Length: PIC:

Default Value: Allowable Values: any

Assigned by the Health Plan and collected by EDI Coordinator via the DHS Electronic Data Transmission Request Form.

City

Length: PIC:

Default Value: Allowable Values: any

Assigned by the Health Plan and collected by EDI Coordinator via the DHS Electronic Data Transmission Request Form.

Contact email

Length: PIC:

Default Value: Allowable Values: any

Assigned by the Health Plan and collected by EDI Coordinator via the DHS Electronic Data Transmission Request Form.

Contact FAX

Length: 12 PIC: X(12)

Default Value: Allowable Values: any

Assigned by the Health Plan and collected by EDI Coordinator via the DHS Electronic Data Transmission Request Form.

Contact Name

Length: PIC:

Default Value: Allowable Values: any

Assigned by the Health Plan and collected by EDI Coordinator via the DHS Electronic Data Transmission Request Form.

Contact Telephone

Length: 12 PIC: X(12)

Default Value: Allowable Values: any

Assigned by the Health Plan and collected by EDI Coordinator via the DHS Electronic Data Transmission Request Form.

Date Created

Length: 8 PIC: DATE

Default Value: 1 Allowable Values: 1 – 999999999

This field is initialized to '1' by the EDI Coordinator during setup of the Health Plan on the Health Plan Maintenance File. The field is incremented by '1' each time an envelope structure is initiated. The value rolls back to '1' when the maximum number value is exceeded.

Federal Employer Identification Number (FEIN)

Length: 9 PIC: X(9)

Default Value: Allowable Values: any

Assigned by the Federal Government to the Health Plan. The EDI Coordinator collects this information via the DHS Electronic Data Transmission Request Form.

Group Control Number

Length: 9 PIC: 9(9)

Default Value: 1 Allowable Values: 1 – 999999999

This field is initialized to '1' by the EDI Coordinator during setup of the Health Plan on the Health Plan Maintenance File. The field is incremented by '1' each time an envelope structure is initiated. The value rolls back to '1' when the maximum number value is exceeded.

HCP Code

Length: 3 PIC: X(3)

Default Value: Allowable Values: as assigned

Assigned by the MMCD Program Area to each Health Plan.

Interchange Control Number

Length: 9 PIC: 9(9)

Default Value: 1 Allowable Values: 1 – 999999999

This field is initialized to '1' by the EDI Coordinator during setup of the Health Plan on the Health Plan Maintenance File. The field is incremented by '1' each time an envelope structure is initiated. The value rolls back to '1' when the maximum number value is exceeded.

Identification Number

Length: 15 PIC: X(15)

Default Value: Allowable Values: any

Assigned by the Health Plan and collected by EDI Coordinator via the DHS Electronic Data Transmission Request Form.

Usage Indicator

Length: 1 PIC X(1)

Default Value: T Allowable Values: T=test, P=Production

The EDI Coordinator initializes this field to 'T' during setup of the Health Plan on the Trading Partner Maintenance File. Throughout the development and testing phase the value remains at 'T'. Only after trading partner testing has been completed and agreement has been reached with the Health Plan does this value get changed to 'P' by the EDI Coordinator. The value reverts to a 'T' whenever testing is required with the Health Plan.

State

Length: PIC:

Default Value: Allowable Values: any

Assigned by the Health Plan and collected by EDI Coordinator via the DHS Electronic Data Transmission Request Form.

Total Transaction Count

Length: 9 PIC: 9(9)

Default Value: 1 Allowable Values: 1 – 999999999

This field is contains the total number of transactions in a given file. A transaction is defined as a complete 2000 Looping structure beginning with the INS segment. Value is incremented by '1' for every INS segment in an 820 Transaction file.

Transaction Type

Length: 3 PIC: X(3)

Default Value: Allowable Values: 820, 820

Assigned by the Health Plan and collected by EDI Coordinator via the DHS Electronic Data Trading Partner Profile Form.

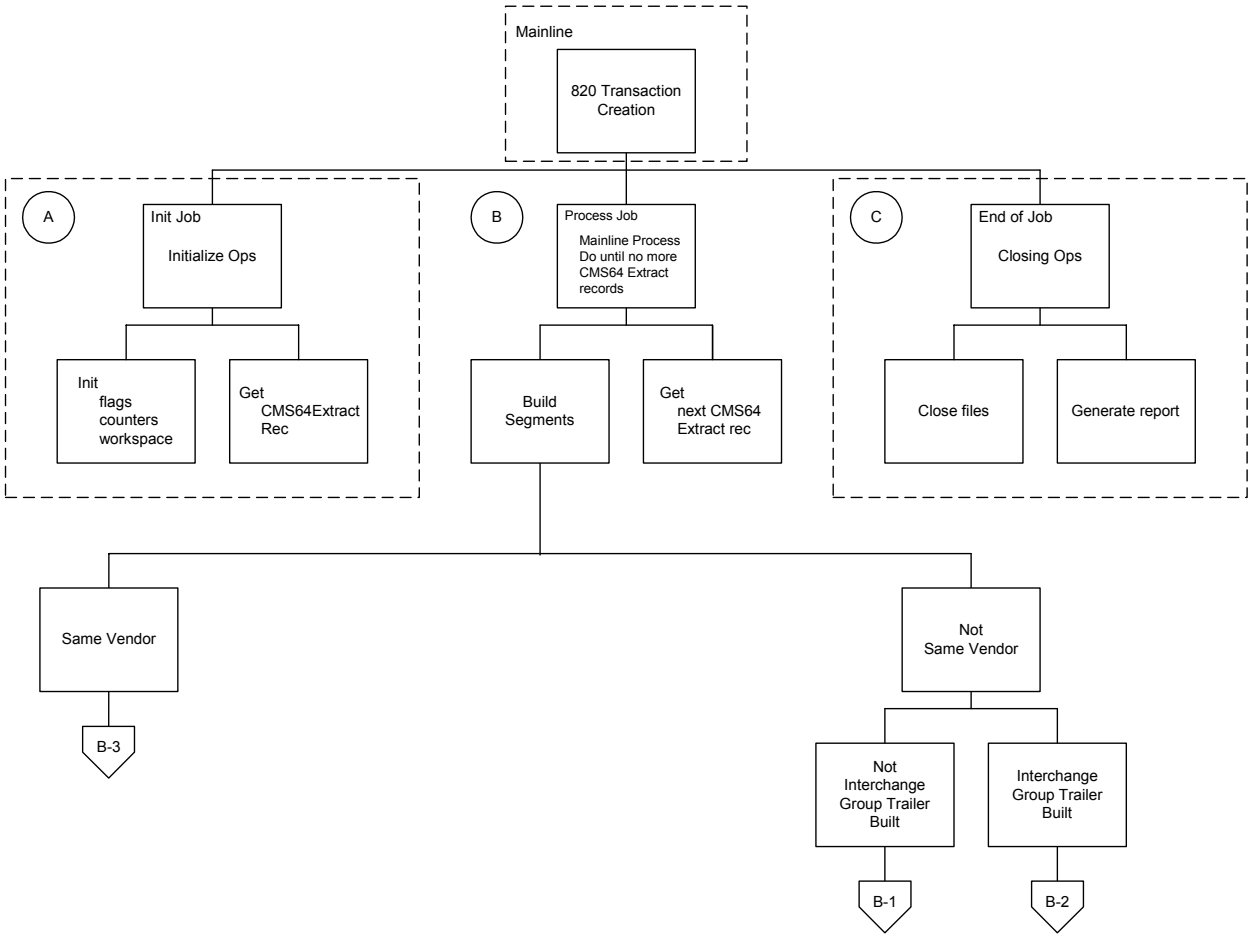
Zip/Postal Code

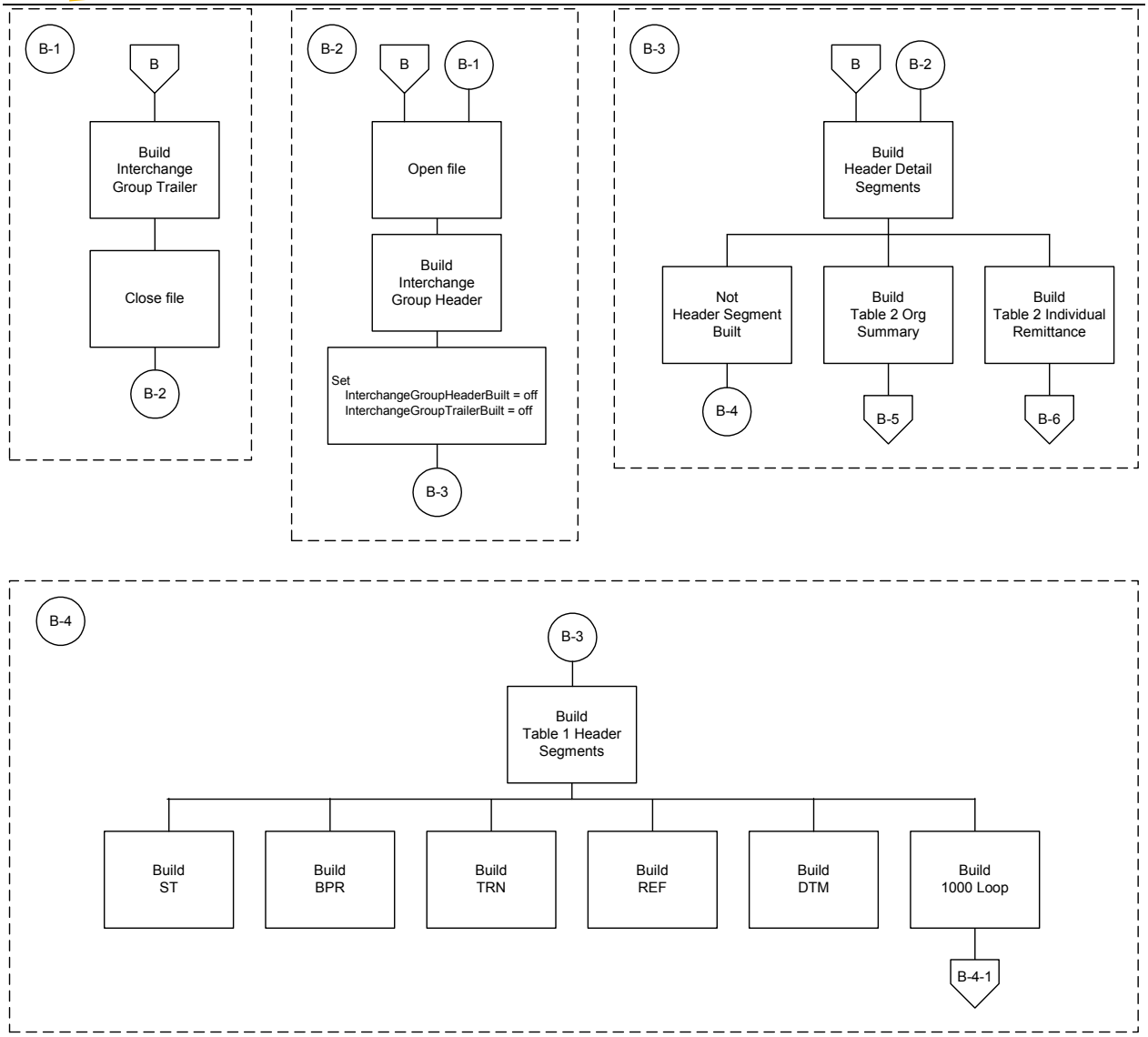
Length: PIC:

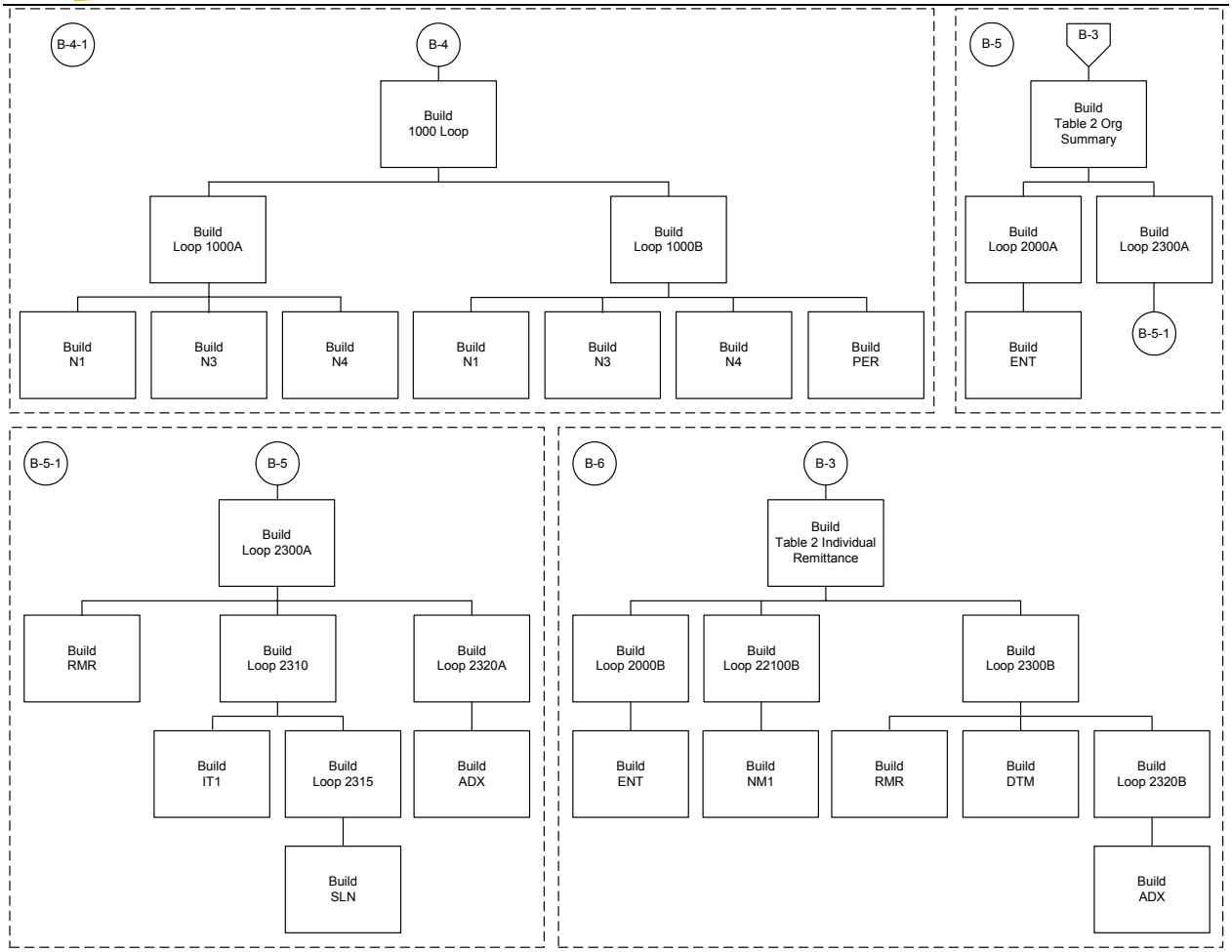
Default Value: Allowable Values: any

Assigned by the Health Plan and collected by EDI Coordinator via the DHS Electronic

9.7 Attachment G – 820 Transaction Functional Modeling Diagram




B-1
B
Build Interchange Group Trailer
Close file
B-2
B-2
B
B-1
Open file
Build Interchange Group Header
Set
InterchangeGroupHeaderBuilt = off
InterchangeGroupTrailerBuilt = off
B-3
B-3
B
B-2
Build Header Detail Segments
Not Header Segment Built
Build Table 2 Org Summary
Build Table 2 Individual Remittance
B-4
B-5
B-6
B-4
B-3
Build Table 1 Header Segments
Build ST
Build BPR
Build TRN
Build REF
Build DTM
Build 1000 Loop
B-4-1


B-4-1
B-4
Build 1000 Loop
Build Loop 1000A
Build Loop 1000B
Build N1
Build N3
Build N4
Build N1
Build N3
Build N4
Build PER
B-5
B-3
Build Table 2 Org Summary
Build Loop 2000A
Build Loop 2300A
Build ENT
B-5-1
B-5-1
B-5
Build Loop 2300A
Build RMR
Build Loop 2310
Build Loop 2320A
Build IT1
Build Loop 2315
Build ADX
Build SLN
B-6
B-3
Build Table 2 Individual Remittance
Build Loop 2000B
Build Loop 22100B
Build Loop 2300B
Build ENT
Build NM1
Build RMR
Build DTM
Build Loop 2320B
Build ADX

9.8 Attachment H - Pervasive Software

MARKETWARE TECHNOLOGIES

Brandon Felts
bfelts@marketwareinc.com
819 Striker Ave. Suite 16
Sacramento, CA 95834
Phone (916) 925-3337 x3330
Fax (916) 925-4877
Toll Free (800) 870-3337
www.marketwareinc.com

Quote Number: 22956
Quote Date: 03/01/2004
Expiration Date: 04/01/2004
Customer Number:

Bill To:
CA Dept of Health Services - PSD HIPAA Compliance
8950 Cal Center Drive
Bldg. 2 Suite 140
Sacramento, CA 95826
JLazaro@dhs.ca.gov
916-255-5274

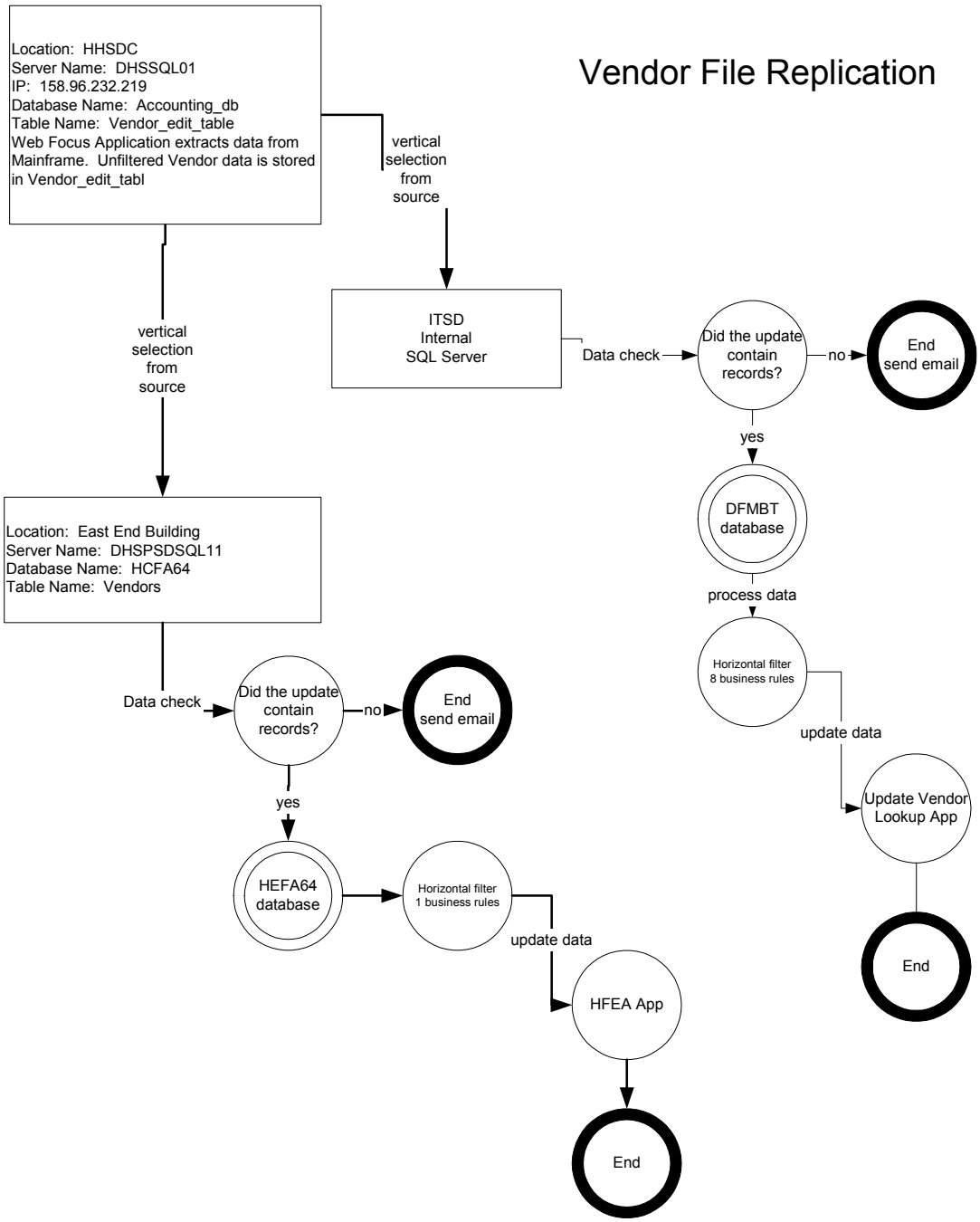
Ship To:
CA Dept of Health Services - PSD HIPAA Compliance
8950 Cal Center Drive
Bldg. 2 Suite 140
Sacramento, CA 95826

Contact: Jon La

Manufacturer	Manufacturer Part#	Contra	Unit Price	Qty	Line Total
PERVASIVE	W409-7.5.5 (QTY 5)	1-0 -7	$1 13 00	1	$12,135.00
DATA JUNCTION ENTERPRISE EDITION, MULTI-T AD 5 C					
PERVASIVE	SW409-7.5.5 (QTY 5)	-7	$77 00		$775.00
DATA JUNCTION ENTERPRISE EDITION, TI-T A 5 SIL P					
PERVASIVE	MW409-7.5 (Q 5)	1 7	$2,12	1	$2,120.00
DATA JUNCTION ENTERPRISE ON, T-T E 5 CK MA ANCE SUBSCRIPTION 1 YEAR					
PERVASIVE	A PAA TY 5)	1	$3,130.00	1	$3,130.00
HIPAA ADAPTER - 5 PACK					
PERVASIVE	HIP QT	1 0	$1,445.00	1	$1,445.00
HIPAA ADAPTER - 5 PACK SI UP					
PERVASIVE	M HI 7.5. QT	1 01-70-03	$870.00	1	$870.00
HIPAA ADAPTER - 5 PACK MAINTE A E SU CRIPTION 1 YEAR					
PERVASIVE	SM II A	1-01-70-03	$481.50	1	$481.50
HIPAA METADATA SCHEMA, A ACTION SET					
PERVASIVE	DHIPAA	1-01-70-03	$481.50	1	$481.50
HIPAA METADATA SCHEMA M ENANCE SUBSCRIPTION 1 YEAR					
PERVASIVE	W418-7.5.5	1-01-70-03	$4,550.00	1	$4,550.00
DOCUMENT SCHEMA DESIGNER - 5 PACK					
PERVASIVE	SW418-7.5.5	1-01-70-03	$385.00	1	$385.00
DOCUMENT SCHEMA DESIGNER - 5 PACK SILVER SUPPORT					

9.9 Attachment I - ITSD Vendor File Replication

This is a data flow for the HCFA64 vendor table update process that is executed by ITSD.



9.10 Attachment J - Vendor File Selection Criteria

This code needs to be modified to include vendor FEIN.

```
/* vertical filter from HHSDC DHSsql01 to dhspsdsql11
/* step 1
select [Vend_id],
        [Vend_id_sfx],
        [Vend_name],
        [Vend_addr1],
        [Vend_addr2],
        [Vend_addr3],
        [Vend_city],
        [Vend_state],
        [Vend_fcntry],
        [Vend_zip],
        [Vend_type]
from [Accounting].[dbo].[Vendor_edit_table]

/*horizontal filter on DHSpsdsql11 vendors table
/*step 2
use hcfa64
GO

/* First condition for unwanted records:  Remove vendor_type equal to 1 */
Delete vendors where vendor_type = '1'

/*insert into Vendor table
select [Vend_id],
        [Vend_id_sfx],
        [Vend_name],
        [Vend_addr1],
        [Vend_addr2],
```

```
        [Vend_addr3],
        [Vend_city],
        [Vend_state],
        [Vend_fcntry],
        [Vend_zip],
        [Vend_type]
from [hcfa64].[dbo].[Vendor]
```